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ABSTRACT

The design and evaluation of a secondary special education program is described. The program is noted to incorporate four phases: Phase-I evaluating the learning laboratory (LL) concept; Phase II-field testing the exportability of the LL concept; Phase III-providing a document explaining how to organize, staff, and operate a LL; and Phase IV-implementing the LL concept in various districts. Among topics covered in a section on practicum design are a LL description, LL research, LL cost analysis, and a summary of cognitive data gathering methods. Four brief chapters present information on an approach to meeting the educational needs of secondary special education students, evaluation of the program, the efforts of program participants, and a summary and conclusion. The organizational structure of the high school lab is outlined for four school settings. Appendixed materials comprise the bulk of the text and include the LL concept manual for administrators, detailed information on data collection and analysis, the organizational structure of the LL model, a description of a transported model, literature research, the practicum proposal, the Practicum interim report, and the annual Texas superintendents report. (SB)

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AN APPROACH TO MEETING THE EDUCATIONAL NEEDS OF
SECONDARY SPECIAL EDUCATION STUDENTS

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Austin Cluster
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Introduction

In September 1974, the North East Independent School District in San Antonio, Texas, presented for review to visiting administrators from four school districts its unique learning laboratory concept for meeting the needs of certain special education students on secondary campuses. Especially, the group to be served consisted of language and/or learning disabled students (L/LD) and minimally brain-injured students (MBI).

Sensing, rather than judging from hard data, the efficiency of the learning lab concept, the four administrators agreed to participate in a research effort to prove that the learning lab is not only an efficient way to organize instruction for L/LD and MBI students, but is equally as efficient with slow learners, academically behind students, and discipline problems.

Accordingly, a plan of involvement for research was established. This plan was submitted as a Maxi I Proposal by the authors in the fall of 1974. The problem as identified in that report is three-fold:

- (1.) Special education programs are historically geared to elementary rather than secondary students; hence, few classroom alternatives exist for remedial intervention at the secondary level.
- (2.) Traditional special education teachers at the secondary level work with a much smaller number of students than do regular secondary teachers. This small ratio of teacher-to-student in special education is unacceptable to most secondary administrators and regular teachers.
- (3.) There exists few workable school-wide plans for late intervention (as opposed to elementary school age intervention) which will fit into most secondary schools in Texas.

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AN APPROACH TO MEETING THE
EDUCATIONAL NEEDS OF SECONDARY
SPECIAL EDUCATION STUDENTS

Abstract

This practicum proposed to evaluate and transport a new approach to meeting the needs of special education students. An indepth evaluation of an existing model was conducted with target and control populations identified. A research design was developed and followed. Students from the target schools were matched on five independent variables with students from four other districts serving as the control groups. A one-to-one match was made for over 500 students. A transported model was developed in another district and evaluated against the original model.

In addition to field based research, an extensive search was made of the literature to seek out similar programs and practices. A unique approach to survey activities for the state as a whole was conducted. A manual fully explaining the new approach, called the "Learning Lab" concept was developed. This manual and the concept was shared with several other districts for possible implementation. Support for the new model was secured and tentative commitments were given to implement the "Learning Lab" concept. Additional plans for wider implementation of the model and dissemination of the manual were formulated.

Practicum Design

Four phases were incorporated into the design of this practicum.

Phase I was an evaluation phase of the Learning Lab concept. It consisted of cognitive and affective data gathering using selected lab students as the target population with matched students from districts not having a Learning Lab model. In addition an analysis was made of the state's staffing pattern to determine whether most other Texas districts would have the economic capability to staff such a concept.

Phase II concerned field testing the exportability of the Learning Lab Concept. The North East Independent School District model was field tested at Samuel Clemens High School in the Schertz-Cibolo-Universal City Independent School District. Part two of the text of this practicum is a description of the transported model.

Phase III provided a definitive and much needed document explaining how to organize, staff, and operate a Learning Lab. Part three of the text consists of the document, "Establishing a Learning Laboratory: A Manual for Administrators."

Phase IV involved the actual implementation of the Learning Laboratory Concept in districts other than North East. Part four of the texts consists of both descriptions of actual implementation and intent to implement.

The division of the text of this Practicum into four phases attends the purpose of the authors to follow closely the Practicum Proposal in a step-by-step analysis of their solution to the problem of Meeting the Educational Needs of Secondary Special Education Students.

Following the four part chapter of the text is an evaluation/analysis of the hard data generated from this research study.

Although many documents are included in appendices, not one is seen to be extraneous. Each is significant either for that which it includes or for that which it does not.

The Learning Lab: A Description

The Learning Lab is an organizational plan whereby students identified as L/LD, MBI, ED, or a combination of these can be served in a self-contained learning environment utilizing individualized instructional techniques. The individual students curriculum is based on his interests, his needs, and his learning mode. The identified student spends time both in the regular classroom and in the Learning Laboratory.

In the North East Independent School District there are ten secondary schools either with their own version of the Learning Lab concept. Each Learning Lab program developed its own organizational structure, with attention to personnel, students served, curriculum, instructional arrangements, physical arrangements, and future plans. These reports are provided in the appendix.

The Learning Lab: Operational Criteria

The following operational criteria are demonstrable through the Practicum research.

1. The Learning Lab concept can be staffed within existing staffing formulae, utilizing mainstream teachers and special education teachers, and still maintain accreditation standards within the secondary pupil-teacher ratio standards.
2. The Learning Lab concept can incorporate the curriculum elements to serve the unique pupil needs of a campus wherein the Learning Lab is established.

3. The Learning Lab Concept can provide academic and behavioral support to those students who are functioning below the age-grade expectancy levels.
4. The Learning Lab Concept has the feature of transportability in its organizational structure that enables the basic program concept to become functional in any school district operating a program of Comprehensive Special Education for Exceptional Children (Plan A).

The success of the Learning Lab Concept prior to its evaluation by the writers of this practicum led the North East District to make several specific predictions on that basis.

1. Significant cognitive academic gains would be made by all students participating in the Learning Lab Project.
2. Significant behavioral gains would be made by all students participating in the Learning Lab Project.
3. Significant academic gains and behavioral gains would be made by all students participating in a non-district Learning Lab Project based on the North East model that will parallel those gains made by North East students.
4. Significant gains in acceptance of students previously stigmatized as "special" or "different" would be noted.

This study seeks to justify those predictions while at the same time providing an honest critical review of the cognitive and affective growth of students in the Learning Lab.

The Learning Lab Research

A Review of the Literature:

A survey of current Texas practices in regard to meeting the needs of secondary special education students revealed almost nothing. For this reason this survey of existing practices in the state of Texas was modified. The Director of Evaluation and Administration of the Special Education Department of the Texas Education Agency suggested a better procedure than that originally proposed. His office provided the writers a state-wide composite of the Special Education Section of the Annual Superintendent's Report. This composite was a fourteen page summary of all the activities regarding special education in the state. This report provided information that no survey could have done.

The composite shows: (1.) that by far the largest concentration of special education personnel and students is at the elementary level, (2.) that the largest numbers of special education students not receiving services are at the secondary level, (3.) that the secondary special education students are mainly being served by resource room arrangements, (4.) that the highest percentage of students needing reevaluation for special education services is at the secondary level, and (5.) that the lowest percentage of special education students being served in relationship to the regular population is at the secondary level.

Further attempted searches into the literature of secondary

special education proved that by far the vast majority of articles, publications, and journals in the field of special education center on the elementary age students.

Even a computer search was conducted through a private firm (The Texas Information Service) to obtain literature which the participants might have overlooked. This proved interesting but not truly significant. It was concluded that if programs similar to the learning lab concept are being conducted, they are not being reported in the usual journals.

The Learning Laboratory: Cost Analysis

Cost analysis of any educational innovation is important and the learning lab concept is no exception. However, simple math was all that was needed to show that the concept could be introduced in any Texas district operating under the state's educational financial plan.

It was assumed by all participants in the practicum that this phase would take sophisticated computer runs of student schedules of the secondary schools in the North East Independent School District to prove that the learning labs could be staffed without large expenditures for personnel out of local funds. When the personnel rosters of professional and para-professional personnel of the secondary North East schools were matched against the state's formula for the allocation of personnel it was found that the host district for the learning lab concept supported their entire secondary operation with almost no purely locally funded personnel units.

The learning lab concept depends on the ability of a district to provide regular teaching personnel, special education teaching personnel, special education teacher aides, and teaching supplies. Once it was found that the regular teaching personnel were nearly all part of the state allocation for teachers at the secondary level there remained only the matter of determining the staffing patterns and supply funds for the special education contribution.

In Texas special education personnel is provided on a formula of the total students in enrollment in a district not on the number of students identified by handicapping conditions. Thus, it proved another exercise in simple arithmetic to show that the numbers and kinds of special education personnel needed for a learning lab is less than those authorized under existing personnel entitlements in Texas.

Teaching supplies, both consumables and capital outlay, exceeded the amount provided out of state funds. This was calculated on the same formula as used by the state to award funds for this purpose. The amount expended at the secondary level for establishing and maintaining the learning labs was greater than the state allocation only when the district's portion of secondary entitlement was calculated. The total spent was considerably less than the district's total receipts from state funds for this purpose. This means that a district wishing to establish a learning lab would have sufficient funds for this purpose, but would have to place funding priority at the secondary level for at least two years.

Such necessity should not be viewed as a negative factor since nearly all innovations in education require heavy start-up funding. Sufficient funds are available if a district wishes to implement this concept to both equip and supply similar programs out of state funds.

Phase I Research: A Summary of Cognitive Data Gathering Methods

The main emphasis of Phase I was a research project gathering pre and post cognitive data and affective data on both students receiving the learning lab treatment and those not receiving this treatment.

A research design was developed which met the standards of controlled research with a broad enough sample to be significant. The data was computer analyzed through the local Education Service Center here in San Antonio.

Since the learning lab is a development of the special education section of the North East Independent School District the students in that district were the target group. All ten secondary schools had developed a form of this concept. For research purposes two high schools out of the four and three middle schools (Junior Highs) out of the six were selected using the random table of numbers.

All students in the learning lab program in the selected schools (880 students) were assigned code numbers and placed on a list showing five independent variable: age, sex, grade placement, I.Q., and classification (regular or type of special education). These lists were provided four cooperating districts without the learning lab concept for comparison. Over 550 of the original target students were matched on each of the five variable. Sex, grade placement, and classification were exact matches. Age matches had to be plus or minus six months while I.Q. matches were plus or minus ten points.

The remainder of the North East Independent School District secondary schools were all given the same pre and post cognitive testing. In addition the affective data was gathered on all of those students as well. At no time was it revealed to the North East administration or staff the identity of the target schools being matched.

As a part of Phase II, similar data was gathered on the transported model of the learning lab concept being implemented in Samuel Clemens High School of the Schertz-Cibolo Universal City Independent School District. This data was matched with the original target schools to analyze the difference between the original model and the transported version.

Once the data was gathered, a computer analysis was made matching the controls against the target schools, the N.E.I.S.D. target schools against the non-target N.E.I.S.D. schools and each individual N.E.I.S.D. secondary schools against a group composed of all other N.E.I.S.D. schools at the appropriate grade level. In addition the transported model was matched against the original (NEISD schools) model to ascertain variances.

Affective Data

The affective data was a collection of measureable behavior items that were retrieved from a 100 teaching day period common to all of the districts in the research project. These items were: referral to the administration for discipline, suspensions, expulsions, drop outs,

and days in attendance. The data to be gathered was not revealed to the respective schools until after the 100 teaching day period had passed and the collection of the data began.

Summary of: Analysis of Research Data

The results of the analysis of the data were not overwhelmingly favorable to the learning lab concept. The results were positive enough to support the basic premise of the worth of the learning labs. Because the practicum design focused on the administrative organization of the learning lab concept and its transportability and not on the methodical or even quality of instruction in this new concept, results which did not measure up to practicum proposal expectations are not injurious to this practicum. Another section of this report contains a full report on the data analysis.

The Transported Model

Unfortunately the cognitive data on the students in transported model had to be abandoned due to the failure of the proper administration of the pre-testing. Even though the data was gathered, machine scored, and punched for the computer run; it had to be discarded due to this problem.

The affective data was correctly gathered from the transported model and was used in the final computer analysis. This data is also reported fully in the appendix.

The first year of the transported model was so successful that the principal and local special education director of the host dis-

trict were invited to present a paper on the model to a region wide conference of secondary staff from twenty school districts. June 17, 1975 at Education Service Center Region XIII. In addition, the transported model survived its first year so successfully that it will definitely be continued next year and in the future.

An essential ingredient of the transportability of the Learning Lab Concept is the manual for administrators who wish to establish and operate similar programs. Phase III of this practicum consisted of the writing of such a manual.

The manual is designed to provide both the philosophical answers and the practical administrative answers to questions which might be raised by those in authority in districts outside of the original district (N.E.I.S.D.) and the host district for the transported model, (S.C./U.C.I.S.D.)

A separate section of this practicum contains a manuscript of the manual which will be printed for statewide distribution.

The Learning Lab Concept: Transporting the Model

Phase IV, transporting the model, has been more difficult to accomplish than originally anticipated. The problems of transporting any new concept in education from one district to another are always large. However, the major stumbling block to transporting the model is legislative change.

Legislation passed by the 64th Session of the Texas Legislature has placed all special education programs in the state under a cloud of uncertainty. Indeed, even regular education fundings have a wide assortment of new rules and regulations strange to Texas educators. The final education package was passed into law and signed by the Governor in June, 1975. As one of its major provisions, this new legislation changes the amount and method of state funding, the financial obligations of all districts in the state, the rules and pay schedules for utilization of personnel, the length of service of selected groups of educators, the job descriptions of all non-teaching personnel; the method of determining kinds of classification of personnel, and the method of determining student attendance.

At present the state central education agency (Texas Education Agency) is conducting a series of statewide meetings with superintendents and selected local staff members to interpret the impact of this educational upheaval. The Texas State Board of Education has not even adopted the new regulations which must be passed to allow districts to function for the 1975-76 school year.

Special Education as well as vocational programs in the state have received a legislative mandated ceiling for the first time in the history of the state. The uncertainty of this change has made the local districts of the state develop a cautious attitude toward any new venture at this time.

At the present time it is impossible to state what districts of the state will implement the learning lab concept. Certainly, it will be implemented by fewer districts than had originally been anticipated.

Several districts have indicated their willingness to create a learning lab providing they can do so under the new legislative mandate. These districts include:

- San Antonio ISD
- Ft. Bend ISD
- East Central ISD
- Ft. Sam Houston ISD
- Uvalde ISD
- South San Antonio ISD
- Floresville ISD
- Corpus Christi ISD

Summary of Research

It was a by-product purpose of this practicum to determine the effectiveness of the Learning Lab Concept for meeting the needs of secondary special education students in the North East School District by testing selected students in reading achievement, arithmetic achievement, and affective school response.

Testing results indicated no overwhelming difference between learning lab and non-learning lab participants. The difference is sufficient, however, to support the assumption that the Learning Lab Concept is effective for delivering services which produce both academic and affective gain in secondary schools.

The research clearly supports the transportability of the concept. In terms of cost and organization, the model is seen as one which can be transported.

Perhaps the most valuable aspect of the research is the manual, "Establishing the Learning Laboratory: A Manual for Administrators". An outline of the manual follows seven points; philosophy, history, description, rules, staffing, research, and planning.

In its final analysis this practicum has specifically addressed itself to its conceptualized solution. In the practicum proposal, the writers stated that what is needed is a workable plan which could be easily modified to fit into the master schedule of most secondary schools in Texas. This plan would address itself to the pupil-teacher ratio, which is so often criticized when secondary special education programs for the learning disabled, minimally brain injured, and emotionally disturbed are proposed.

It is the belief of these writers that the Learning Lab Concept is indeed such a workable plan and that it is both effective and transportable.

CHAPTER ONE

An Approach to Meeting the Educational Needs of
Secondary Special Education Students

Secondary special education has traditionally ranked lower in priority than its elementary counterpart. Such an emphasis at the elementary level is certainly not misplaced. What is deplorable, however, is that efforts to meet the needs of secondary special education students have resulted in very little progress.

The secondary special education student may be learning and/or language disabled, L/LD; minimally brain injured, MBI; emotionally disturbed, ED; or a combination of these.

For meeting the special needs of such students, few programs of merit have been developed. There are several reasons for this lack.

- . . . most teachers and students in colleges and universities who enroll or teach in special education courses are elementary certified or oriented.
- . . . teachers, aides, and supportive professional personnel deployment is invariably heavier at the elementary level.
- . . . the philosophy of nearly intervention has contributed to the lack of secondary alternatives.
- . . . the problem of administrative organization at the secondary level poses an obstacle too formidable for most educational systems to attack.

Although there are adequate to excellent programs for secondary mentally retarded and/or physically handicapped, L/LD, MBI, and ED students have been largely ignored. This failure to confront such obvious student need is primarily attributable to the twin problems

of scheduling and course credit. These twin problems have made self-contained secondary classes for special education less than adequate while at the same time making it difficult to render resource help. A self-contained classroom can not offer the course credit necessary for graduation without challenging the certification standards of regular education. A resource room concept basically must be organized on a period or longer concept to meet scheduling problems.

It seems impossible to meet the requirements of one and not sacrifice the other.

The majority of programs designed to serve the secondary special education students in Texas are resource in nature. In a resource plan a student attends regular classes except for one or more periods daily when he goes to the special education teacher for resource help. For such a program to be meaningful to the students, not more than two or four students can be assigned to the resource teacher per period. Such assigning creates an average daily student load for a five period teaching day of less than fifteen students. The average teaching load is 150 students for regular secondary teachers. This wide variation in numbers served tends to create resentment and further retards the development of secondary special education programs.

Development of sound special education programs for secondary students has been inhibited by more than just scheduling and course credit difficulties. The secondary administrator is generally unpre-

pared, both by training and interest to develop programs for the exceptional child. Not only is he largely untrained and frequently disinterested, but he is most often under no pressure from his superiors to do so.

Lacking the developmental impetus of interest, ability, and pressure, special education programs for secondary students have been spotty and superficial.

What seems to be lacking is a program for delivery of resource and regular learning assistance which will fit into the course credit and scheduling structure of any high school.

CHAPTER TWO

Evaluation

The practicum was successful when results are measured against stated objective. There were many unexpected obstacles which had to be overcome during the period of time devoted to this effort. Some of the activities are completed but not finished. It is almost a classic illustration of why the practicum approach is indeed superior to other forms of educational endeavors found in most Ed.D. programs.

The manual has been written and dissiminated to some extent, but not to the total possible target group - all secondary administrators in the State. This broader dissimination is beyond the financial means of the districts represented by the participants. However, the Texas Education Agency is still considering our earlier request to print sufficient copies to dissiminate to all of the secondary schools in the state. Don Weston, Director of Federal Projects and Regional Center Services for the Texas Education Agency has agreed to submit a federal dissimination grant for this purpose subject to his immediate superior's approval.

The research phase of the practicum proved that the learning lab concept was fiscally sound. This principle would have made the transportability of the concept very agreeable to secondary administrators under normal circumstances. However, the 1974-75 school year did not prove to be normal. The State Legislature changed all of the rules through the enactment of new legislation concerning school funding.

This bill's impact on all of education in the state will not be known for a least a year. The participants had no way to anticipate this action since major educational financial reform has occurred only twice in the State's history.

This legislative action and the uncertainty it has created will delay the implementation of the Learning Lab Concept in many districts who otherwise would have likely proceeded in this regard. It is anticipated that the concept will again receive favorable consideration after superintendents and school boards have had time to adjust to the impact of the new educational funding rules.

This concept will definitely be implemented elsewhere outside of the original district during the 1975-76 school year. The State's fourth largest district, San Antonio Independent School District, is proceeding with plans for its implementation despite the lack of experience with the State's new funding formulas. Other districts are certain to follow their lead by the 1976-77 school year.

The major objective of the practicum was to examine the transportability of the Learning Lab Concept. The research design of testing students both in the project and outside the project has had very beneficial results. The cognitive testing appears to show that additional work is needed on the methodology and techniques of instruction utilized by the staff of the Learning Labs. Several North East principals have decided to make additional improvements in their models of the Learning

Lab for the 1975-76 school year. Increased administrative attention and effort toward the original learning lab models by the staff members closest to the scene will only improve the future transportability of this concept.

Even the limited dissimulation of the learning lab manuel has resulted in interest among the various professional groups. Invitations have been issued for staff members working in this project to appear on several conventions and meetings in the State.

If visitors are any indication of interest, the Learning Lab Concept is very successful. Both the original model in North East Independent School District and the transported model in Schertz-Cibolo/Universal City Independent School District have received dozens of on-site visitors. Even two representatives of the Special Education Department of the Texas Education Agency have toured the district to examine this new concept firsthand.

Overall, the participants are pleased with the results of the practicum:

In Phase I, both the research design and the unit comparison was completed.

Phase II, the transported model, was highly successful. The Learning Lab Program of Samuel Clemens High School survived its first year and will be continued in the future.

Phase III, the document project, has been finished. The document chosen was a manuel for administrators which answers most of the questions which could be raised by this concept.

Phase IV, the implementation stage, will never be completed. At least one district, San Antonio Independent School District, has definite plans to initiate a similar model for the 1975-76 school year. Other districts already listed, plus some not listed, have made sufficient inquiry about the new concept that its wide-spread adoption is all but assured. Naturally, it is expected that it will take years for the concept to be fully implemented in a majority of district of the state. However, the progress is promising despite unexpected legislative obstacles.

CHAPTER THREE

Participants Effort

All participants cooperated fully in the conduct of the practicum. The originally conceived roles for each person was followed as closely as possible. Various participants agreed to take additional responsibilities or assist other participants when called upon to do so. No adequate log was kept of the hours spent by individual participants. There were scheduled meetings, called meetings, informal sessions in conjunction with other Nova activities, many telephone conferences, and personal visits aimed at completion of the practicum. The hours of effort did equal or exceed that expected for the practicum.

The amount of time devoted to the project by other than the participants is almost incalculable. Secretaries, teachers, aides, administrators, and even several persons not directly concerned with the Learning Lab model devoted time directly and indirectly to this practicum. For example, a guidance coordinator of one of the districts was as a resource person who provided expertise in selecting the pre and post cognitive battery to be administered. This gentleman spent over two hours on long distant telephone conversations with other guidance people to make certain that the advice was accurate.

Unless exact quotations for amounts for time and funds expended are needed, the authors feel that the estimates originally given in the practicum proposal are still applicable.

CHAPTER FOUR

Summary and Conclusion

The Learning Lab Concept is a viable alternative for secondary administrators to consider when faced with self-contained special education classes or inefficient resource classes. It's transportability has been proven.

There now exists a manual which provides definite answers to question which can be posed by school officials. This manual is available to provide information and to be a catalyst to wide spread implementation of the concept.

Some implementation of the concept has been achieved. Hopefully, additional districts will experiment with the model in ensuing years.

ORGANIZATIONAL STRUCTURE OF THE

TYPICAL HIGH SCHOOL LAB

- I. Rationale for the organizational structure
- II. Personnel
 - A. Number of classroom teachers
 - B. Number of student resource teachers
 - C. Number of teacher aides
- III. Students (as of November 15, 1974)
 - A. Number of regular students
 - B. Number of qualified students for lab placement only
 - C. Number of qualified students for resource
 - D. Method of identifying and qualifying students
- IV. Curriculum
 - A. Academic subjects for which students receive credit (include grade level and whether basic or regular)
 - B. Ancillary services for which students do not receive credit (helping teacher, resource, etc.)
- V. Instructional Arrangements
 - A. Average number of students per classroom
 - B. Students rotate or are assigned permanently to one teacher and classroom, etc.
 - C. Team teaching and how it is implemented (CTU's with SR teachers)
- VI. Physical Arrangements
 - A. Housed as a separate unit or as part of another department
 - B. Open classroom with stations for skill areas, or separate rooms for academic subjects
- VII. Plans for the future

ORGANIZATIONAL STRUCTURE OF THE ROBERT E. LEE HIGH SCHOOL LAB

I. Rationale for the organizational structure

The lab was set up to meet the needs of the students here at Lee. There are two sections in the lab. The first section is the Reading Lab which serves students with serious reading and language disabilities. The second section is called Developmental English. This was set up to serve students who need a basic English class.

II. Personnel

Working in the lab, there are two regular classroom teachers, seven student resource teachers, and three teacher aides. A speech therapist is also assigned to the lab on a part-time basis.

III. Students (as of November 15, 1974)

The lab is now serving 161 regular students and 126 students that qualify for lab placement. There are 38 students who qualify for resource, 30 of them are receiving lab and resource help.

Counselors and classroom teachers recommend students with suspected reading problems for testing. Mrs. Dorothy Kirby administers several tests: the Stanford Diagnostic Reading Test, the Otis, the WRAT, an informal picture writing test, and various others as needed.

Students who are having serious problems in math are recommended through the classroom teacher for testing. They are given either the WRAT or the Key Math as is necessary to evaluate strengths and weaknesses.

IV. CURRICULUM

Students in the Reading lab receive credit for a basic English class on any of the four grade levels. Developmental English students receive credit for regular English on four grade levels.

A few students report to resource teachers for their math class and receive credit for FOM I. Several services are available on a non-credit basis. A speech therapist is at the school two days a week. One of the resource teachers acts as a crisis teacher, lending emotional support to students when needed. A number of the students drop by when they need special help in a class. The lab is also serving as a language development class for several non-English speaking students.

V. Instructional Arrangements

There is an average of 18 students per classroom in both the Reading and Developmental English classes. In the Reading lab students rotate between three groups: Word Skills, Comprehension, and Writing. Students are grouped by reading level and remain in each room for three weeks. Developmental English students remain in one classroom with one teacher, except for when referred to the lab on a short-term basis for special assignments. Students from the lab move into Developmental English if the teachers feel the students are ready for advanced skills.

VI. Physical Arrangements

The lab is housed as a separate unit and is considered a department within itself. The lab occupies five adjacent classrooms in the East Wing. There are also three small rooms serving as resource classes.

and a testing room. Most of the classes are set up as open classrooms with stations for skill areas.

VII. Plans for the future

We're hoping that the English department will provide basic classes so that the lab will become more of a team teaching situation again. We also plan to integrate other academic areas into the lab, beginning with math.

ORGANIZATIONAL STRUCTURE OF THE

MAC ARTHUR HIGH SCHOOL LAB

I. Rationale for the organizational structure

- A. The lab affords a learning situation in which new methods and ideas can be utilized. Emphasis is placed on individualized instruction based on interest, need and learning modes of students. Giving the "identified" child an opportunity to function in a regular classroom and benefit from activities with students of diverse abilities and capabilities. The lab concept provides opportunity and motivation for each child to develop his potential as a total person, socially, intellectually and emotionally.

II. Personnel

- A. Four classroom teachers
- B. Four student resource teachers in lab
 - a. One resource teacher
- C. One teacher aide
- D. Speech therapist

III. Students

- A. 330 regular students
- B. 15 + 60 qualified for lab placement
- C. 33 qualified for resource
- D. 15 students in resource who are also in lab
- E. 461 total lab roll
- F. Identifying and qualifying students
 - 1. Math
 - a. Use WRAT math section; Otis Lennon-Mental Ability Test and Key Math.
 - 2. English and Social Studies
 - a. Otis-Lennon Mental Ability Test
 - (1) Used scores from Otis-Lennon Mental Ability Test for indication of expected reading ability-compared with reading score. Used at least two year discrepancy as indicator.

- b. Stanford Paragraph Meaning
- c. WRAT spelling section

IV. Curriculum

A. English

1. Four sections of regular Freshmen English
 - a. Students placed by computer not hand selected. During school year any student showing need of help maybe into one of the lab classes.
 - b. Lab classes do not follow regular English curriculum.
2. One section Continuous Progress English
 - a. This class is basically composed of non-English speaking students. Any student who reaches the place where he can function in a Basic or Regular English class may be reassigned during the school year.

B. Social Studies

1. Four sections of regular American History classes
2. Majority of students are ninth grade but some in grades 10 through 12.

C. Math

1. F.O.M. Freshmen classes, plus some 10th graders, five sections.
2. One group works as a unit while a second group works on an individualize progressive program.
3. Students selection on recommendation from middle school, test scores and achievement.

D. Speech Therapest

1. Student load of seven. (Four of these recieve lab or resource help.)

V. Instructional Arrangement

A. Number of students per classroom

1. English
 - a. 25 qualified lab students
 - b. 3 resource

- c. 90 regular
- 2. Math - continuous progress
 - a. 11 qualified lab students
 - b. 9 regular students
 - c. 3 regular
- 3. Math - F.O.M.
 - a. 47 qualified lab students
 - b. 35 regular students
 - c. 8 resource students
- 4. Social Studies
 - a. 33 qualified lab students
 - b. 196 regular students
 - c. 1 resource
- B. Implementation of teachers
 - 1. English
 - a. Students rotate from group to group depending on assigned activity. They are grouped in various way dependent on variables of ability, interest and peer relations.
 - b. Teachers work with students in groups or individual. Students are not aware which are resource and which are regular classroom teachers.
 - c. Class begins as one unit in regular traditional classroom setting. After directions for day are given the class breaks into groups and works in large open lab area and in classroom.
 - 2. Math
 - a. F.O.M. students work as unit under CTU assigned to this lab area. When student is unable to work in unit he moves to Resource teacher and works on an individualized progressive program.
 - b. Each of these units in the Math lab has a regular classroom. CTU with traditional setting utilizing tables and individual desk.

3. Social Studies

- a. Two CTU's and one resource teacher. The classes are divided into three groups. The three teachers present separate lessons and the groups rotate until all pupils have studied with all three teachers and have completed 100% of the assigned work. The resource teacher helps students when they work in large groups and in test situations. Group participation is encouraged and individual instruction is implemented.

ORGANIZATIONAL STRUCTURE OF THE
CHURCHILL HIGH SCHOOL LAB

1. RATIONALE FOR THE ORGANIZATIONAL STRUCTURE

- A. PROVIDE INSTRUCTION FOR THOSE STUDENTS WHO WOULD NOT SUCCEED IN REGULAR CLASSROOMS. THIS INCLUDES LLD, SLOW LEARNER, MBI, AND E.D. PROVIDE SUPPORT FOR THE CTU'S WHO ARE TEACHING THESE STUDENTS. THIS SUPPORT MAY BE THROUGH INSTRUCTION, MATERIALS, AND TEACHER EDUCATION AND THROUGH TEAM TEACHING TECHNIQUES INVOLVING CTU'S AND RESOURCE TEACHERS.

2. PERSONNEL

- A. 5 CTU
B. 6 STUDENT RESOURCE
C. 2 TEACHER AIDES

3. STUDENTS (AS OF NOVEMBER 15, 1974)

- A. 168 REGULAR STUDENTS
B. 85 QUALIFIED FOR LAB PLACEMENT ONLY
C. 32 QUALIFIED STUDENTS FOR RESOURCE
D. STUDENTS ARE IDENTIFIED BY DIAGNOSTIC TESTS (STANFORD DIAGNOSTIC READING, WIDE RANGE ACHIEVEMENT, KEY MATH) THEIR SCORES ARE COMPARED WITH THE D.I.Q. OBTAINED FROM THE OTIS-LENNON MENTAL ABILITY TEST. THEY ARE QUALIFIED IF THEY ARE 2 OR MORE GRADE LEVELS BEHIND IN ACHIEVEMENT. THE PARENTS AGREE TO LAB PLACEMENT, AND A PHYSICAL EXAM SHOW THAT THEIR LOW ACHIEVEMENT IS NOT DUE TO PHYSICAL PROBLEMS.
E. 117 QUALIFIED LAB AND RESOURCE STUDENTS. RESOURCE STUDENTS AT CHURCHILL ARE MBI, ED OR ORTHOPEDICALLY HANDICAPPED AS IDENTIFIED BY STATE GUIDELINES. (PSYCHOLOGICAL, PHYSICAL, ARD, PARENT APPLICATION)

4. CURRICULUM

A. ACADEMIC SUBJECTS

FOM 1,2,3	9TH GRADE	BASIC
FOM 4,5,6	10TH GRADE	BASIC
ENG. 1A	9TH GRADE	BASIC
ENG. 2A	10TH GRADE	BASIC
ENG. 3A	11TH GRADE	BASIC
AMER. HIST. A	9TH GRADE	BASIC
	10TH GRADE	BASIC

B. ANCILLARY SERVICES

HELPING TEACHER
RESOURCE TEACHER

5. INSTRUCTIONAL ARRANGEMENTS

A. AVERAGE NUMBER OF STUDENTS PER CLASSROOM

FOM 1,2,3 FOM 4,5,6
ENG. 1A ENG. 2A
AMERICAN HISTORY A

22 STUDENTS AVERAGE
12 STUDENTS AVERAGE
20 STUDENTS AVERAGE

B. & C.

STUDENTS ASSIGNED IN ENGLISH TO ONE TEACHER. STUDENTS IN FOM MAY BE ASSIGNED TO RESOURCE TEACHER FULL TIME OR PART TIME. STUDENTS IN AMERICAN HISTORY TEAM TAUGHT BY CTU AND RESOURCE TEACHER. THEY USE THE SAME CLASSROOM, PLAN AND PRESENT THE LESSONS TOGETHER.

6. PHYSICAL ARRANGEMENTS

- A. THE CHURCHILL LAB IS HOUSED AS A SEPARATE UNIT WITH SUPPORT FROM THE ENGLISH, MATH AND SOCIAL STUDIES DEPARTMENT.
- B. THERE ARE SEPARATE AREAS IN ONE LARGE AREA FOR ACADEMIC SUBJECTS AND RESOURCE TEACHING.

7. PLANS FOR THE FUTURE

- A. TO ADD THE IPS SCIENCE PROGRAM WITH A RESOURCE SCIENCE TEACHER TO THE ACADEMIC SUBJECTS OFFERED BY THE LAB.
- B. TO ADD ENOUGH MATERIALS AND EQUIPMENT TO THE LAB TO IMPROVE AND PROVIDE SKILL AREAS AND BE MORE FLEXIBLE, INDIVIDUALIZED INSTRUCTION.

ROOSEVELT LANGUAGE SKILL CENTER
ENGLISH IB and IIB - A NEW CONCEPT IN ENGLISH

During the school year 1972-73, North East Independent School District piloted the Language Communication Skills programs on two secondary school campuses. Due to the tremendous success of these programs, the decision was made to expand these programs to all secondary campuses. Thus, during the school year 1973-74 an experimental program in diagnostic team teaching in an open classroom was begun at Roosevelt for Basic English I and II. The goal of the program is to better meet the individual needs of all students in the area of language skill development.

The Roosevelt teaching team is composed of --

1. Team leader: Mrs. Marthes
2. Two English teachers: Mrs. Boyers and Mrs. Klein
3. Two specialist in language development: Mrs. Pahl and Miss Van Dersarl
4. Two teacher aides: Mrs. Matheny and Mrs. Shumake

Four stations have been established based on the major areas of reading and writing development:

1. Composition and Word Study: Mrs. Pahl
2. Comprehension: Mrs. Klein
3. Grammar and Reading Rate: Miss Van Dersarl
4. Study Skills, Occupational Skills, and Appreciation: Mrs. Boyers

The above four stations are located in two portable buildings found at the side of the school which are built facing each other. Each building is divided into two classrooms by a moveable accordion partition. Thus, giving each station its own room.

The advantages of the combined classroom teacher units and the learning disabilities (special education) units, as well as, the physical layout of the program are numerous. Team planning enables the combined talents of the teaching team to be used on organizational patterns, curriculum matters, and on individual problems of the students. This organization provides for more individualization of learning, as well as, more flexible use of time and space. It allows for continuous diagnostic instruction and evaluation during the two years the student is projected into the program. From the standpoint of economy, such a program reduces the cost of specialized resources, as fewer items are required with the establishment of learning stations.

The general objectives for this year are:

1. To establish a system where-by it is possible to diagnose the student's present strengths and weaknesses and to prescribe a personalized course of instruction which will emphasize teaching through his strengths while building up his weak areas.
2. To increase the student's language skills ability in listening, speaking, writing, and with special emphasis on reading.
3. To enable the student to return to a regular classroom situation after attaining proficiency.
4. To provide a classroom situation in which the underachiever can reach his potential and experience success.
5. To develop the student's interest in reading by introducing to him reading materials of high interest which are within his reading levels.

The students in the lab are broken down into several different categories. There is a mixture of Basic (slow) English students (110), L/LD students (50), Resource students (30), and mainstreaming EMR's (10).

This year a screening program is used by the lab leader working with the regular English teachers. Students who are having reading problems are recommended by their English teachers and the Stanford Achievement Reading test is then administered to determine reading level. This reading level along with other information gathered from the cumulative folders or further testing (sometimes the Otis) certain students with very low abilities are recommended for lab placement.

Other screening programs are administered in the spring at the Jr. High level for the incoming freshmen. Also on campus, we have the aide of a Special Education Counselor, who participates along with the testing people from central office, school administrators, the lab team leader, and other teachers in screenings held each week at our school.

Once a student has been scheduled into the lab his strengths and weaknesses in reading are diagnosed by testing with the Stanford Diagnostic test and other tests which are available. The initial and subsequent assignment of students to one of the four different stations are determined by the team based on the reading level.

Thus there are four levels of reading ability:

Level 1 - Non-readers to third grade level - Not over 10 students per class

Level 2 - Fourth grade to lower fifth grade - 10-12 students per class

Level 3 - Higher fifth grade to lower sixth grade - Not over 15 students

Level 4 - High sixth grade and up - Not over 15 students

Students will be rotated on an average of once every three weeks to different sections of the lab. Thus, all the students will have a chance to receive the instruction of all specialists who are available.

Evaluation of students for grading purposes is to be done on an individual basis of self progress. The final grade for credit is Basic English I or II for a six-week or quarter period is the average of all grades made in all sections of the lab where the student has been stationed. Not only do the teachers in the lab work to improve academic skills, but they also work very closely with the students to encourage development of positive attitude towards study habits and courteous classroom behavior. Students are provided with notebooks, text books, and other materials which they will be able to use throughout the year. The only requirements made of the students are to come to class, be on time, work to the best of their abilities and to bring pen, pencil and notebook paper everyday. Only occasionally will there be an outside assignment to make a poster collage or some other type of unique project.

On campus, working adjacent with the lab are several other student resource programs which the lab students benefit from:

1. Two helping teachers (one male and one female)
2. One special education counselor
3. EMR classes with two teachers and an aide
4. Two vocational adjustment coordinators
5. One speech therapist

Our program is in its experimental stage. Our goal is to combine the best possible teaching talents and learning environment to meet our students needs, interests and abilities. To reach this goal we will be initiating new methods, trying new materials, and organizing in different patterns from the traditional. Our students and the team are enthusiastic about our program, and we invite you to visit us to see our Language Skills Center at Roosevelt in action. We teachers and students look forward to a stimulating and profitable year. You will find a summary of course materials below which may be covered in each section of the lab during the coming years.

- SECTION 1: COMPOSITION - WORD STUDY - paragraph construction, sentence construction outlines, sound discrimination consonants sounds, vowel sounds, consonant blends and diagraphs prefixes, syllabication increase vocabulary, homophones, synonyms, antonyms contraction, legibility of handwriting, writing reports.
- SECTION 2: COMPREHENSION - literal comprehension, inferential comprehension, develop interest in reading, increase vocabulary, use context clues detect sentence.
- SECTION 3: GRAMMAR-READING RATE - parts of speech, parts of a sentence, sentence construction, capitalization, punctuation, transformation of sentences. Surveying, skimming, scanning, phrase reading, faster rate, slower rate.
- SECTION 4: STUDY SKILLS OCCUPATIONAL SKILLS APPRECIATION follow instructions, recall information, locate information by using a book, dictionary, or library, organize work. Make logical decisions, handle job problems, research job fields, learn to fill out business forms, evaluate literature, learn to select reading materials which are on the correct reading level.

APPENDIX I

THE LEARNING LAB CONCEPT A MANUAL FOR ADMINISTRATORS

*A new concept for grouping special
education and regular teachers and students
together at the secondary level.*

**NORTH EAST INDEPENDENT SCHOOL DISTRICT
1975**

Ivan W. Fitzwater
Superintendent

Anthony B. Constanzo
Asst. Supt. for Administration & Instruction

Special Education programs throughout the nation have been historically geared to meet the needs of elementary age students. The training programs in colleges have focused on this population; the number of teachers and other personnel have been concentrated at the sixth grade level and below.

This ignoring of the secondary population of students with problems is both a philosophical and practical problem--philosophical, because many authorities believe that problems can be treated at an earlier age and the situation remediated before the student gets older; practical, because the bulk of the secondary special education programs have been developed on a staffing ratio of one teacher to approximately ten or twelve students. This staffing ratio is not acceptable to the majority of secondary administrators who are accustomed to much higher ratios for regular secondary classes.

Secondary administrators for the most part are not well informed regarding special education students or possibilities for creating workable solutions in order to meet the needs of the students in this population assigned to their campus. This lack of information has added to the retardation of growth of programs for handicapped students at the secondary level.

The problem is particularly noticeable in the areas of students with language and/or learning disabilities (LLD), minimal brain injury (MBI), and emotional disturbance (ED). To some degree, answers have been found at the secondary level for the mentally retarded, orthopedic, visually impaired, and other categories of handicapped children. Therefore, this report will limit itself to LLD, ED, and MBI students, whose educational placement poses a nationwide problem, and one of major concern in the State of Texas.

CONCEPTUALIZING A SOLUTION

What is needed is a workable plan which could be easily modified to fit into the master schedule of most secondary schools in Texas. This plan would address itself to the pupil-teacher ratio, which is so often criticized when secondary special education programs for the learning disabled, minimally brain injured, and emotionally disturbed are proposed.

North East Independent School District in San Antonio, Texas, has a program known as the "Learning Lab Project" which attempts to meet both the practical and philosophical objections previously described. The Learning Lab program is unique in that it not only appears to meet the needs of special education students at the secondary level, but also the needs of slow learners, students behind academically, and students with discipline problems.

There is widespread evidence of the success of this program. Students who have previously been disinterested in school have shown a positive attitude change. Lower achieving students have become delighted with their frequent academic successes; their school attendance has subsequently improved. These students have come to feel that the school considers them important and has provided a place for them to receive academic and emotional support.

Classroom teachers who had believed themselves unable to adequately teach these lower-achieving students have learned new instructional and management approaches and are responding much more positively both to students and the teaching process. In a flexible, stimulating environment, they have come to know their students as people with differing needs, and to feel themselves capable of conducting a successful teaching-learning environment to meet these needs. Teachers have responded very enthusiastically to the stimulation of working

closely with each other, sharing ideas, and together deciding upon the best teaching methods and structure of their students in their unique school setting.

What is a Learning Lab? How does it differ from the traditional teaching-learning environment? Is it really more successful? How can a concept of flexibility and change allow for the consistency of structure that so many lower-achieving students need? How can I create Learning Labs in my district?

These are only some of the questions that a number of Texas school districts have begun to ask in response to an introduction to the North East District Learning Lab Project. The purpose of this booklet is to respond to these questions by describing how the Lab concept evolved, what it includes, and how Labs can be created in other districts. Crucial considerations such as cost-effectiveness and staffing patterns will be included. The results of a research study comparing North East Lab students with control students will also be discussed in order to consider the success of the Lab Project.

The Philosophy and History of the Labs

The history of the Learning Labs is closely entwined with the North East School District philosophy of education for all children. Some tenants of this philosophy include:

- (1) All children who can learn in a school setting should be served.
- (2) Students achieving at lower academic levels should not be stigmatized; school staff can avoid labeling these students as "different" by creating situations where they can interact with students of higher academic achievement levels.
- (3) The school's academic and social program should be tailored to meet the student's needs, not the student tailored to the program.

- a. Meeting the student's needs can be best accomplished by individualizing his school program so that he can achieve to his potential and overcome his deficits.
 - b. The program should be flexible enough to allow the student to participate in school-wide academic and social programs in varying degrees according to his ability and needs.
 - c. Lower-achieving students should be provided with supplemental help in any areas requiring remediation.
 - d. The school should provide all students with the skills and awarenesses needed for economic independence and knowledgeable citizenship.
- (4) Lower-achieving students should receive academic credit for work performed in accordance with their abilities.
 - (5) Teachers should be provided the opportunity to work with students at all academic levels in order to broaden the teacher's ability to work successfully with the wider range of young people.
 - (6) Teachers should be given the opportunity to interact with each other and to teach cooperatively in order to share ideas and methods, and to provide stimulation for creativity.
 - (7) Each school must be allowed the flexibility of determining how to best meet students' needs. A good program does not necessarily start in the Central Office; it develops from individual schools' ability to study students' characteristics and to then create a program based on needs. Academic programs naturally differ between schools.

- (8) Any program designed to meet students' needs should also consider taxpayers' needs by being as cost-effective as possible.

The Learning Lab Project developed out of the district philosophy of considering individual student needs. While it was acknowledged in North East District that adequate programming was being provided for the "average" and "above-average" learner, both teachers and administrators felt that the "slow-learners," as well as the students deficient in one or more academic subjects, were not performing to their potential and were not always receiving remediation when necessary. Many of these student problems were viewed as based on poor reading skills.

In order to overcome the acknowledged lack of programming, teachers and principals in one Middle School and one High School in the North East District proposed the development of specialized classes where these students could receive more individualized and concentrated instruction in reading skills. Subsequently, double classrooms were created with a varied selection of materials and audiovisual equipment. Communications skills were stressed and emphasis placed on individual and small-group instruction. Students involved were predominantly from the "slow classes," with half of such class attending the Lab on alternate days.

The success of these early specialized classes led to the proposals by both schools for more comprehensive programs for the following, 1972-73, school year. Emphasis was again placed on communications skills, but a need was felt to include additional specialized teachers and more materials. Proposals included requests for (a) regular certified English teachers, (b) learning and

language deficiencies teachers (LLD), (c) an educational diagnostician, (d) a teacher aide, (e) a psychologist, and (f) a consultant to organize and initiate the programs.

The need for more specialized personnel and materials directed these proposals to the Special Education Office, and subsequently caused the development of the Learning Lab Projects, programs including not only slow learners, but a number of students not previously considered--students categorized as Learning Disabled, Minimally Brain Injured, and Emotionally Disturbed. The Special Education Office agreed to supply the LLD teachers and other specialists requested, as well as materials and money, in exchange for inclusion of these categories of students with the non-special education students in the Labs. It is important to note that part of this cooperative agreement required that the "regular" (non-special education) certified teachers remain in the Labs with the special education teachers so that a sharing of teaching ideas, experiences, and strategies between professionals with different backgrounds would provide a stimulating environment for students. It was decided that the regular classroom teachers participating in the Labs would have fewer students than the traditional regular classroom teachers, and that participant special education teachers would have more students than normally assigned to a special education teacher, so that teaching load would be balanced and neither type of teacher viewed as favored in the program.

In combining these two types of teachers, it was also decided that for future purposes they would not be classified as "regular" or "special education" teachers, but as Laboratory teachers, so that more cohesiveness would be felt. It became natural to extend this non-labeling process to participant students--

subsequently, a student's categorization as "regular" or "LLD" became unimportant to personnel in the program and consideration of individual differences and needs became paramount.

A very critical part of the history of the development of the Learning Lab is based on the changing tides of special education in Texas. For it was in 1972-73 that North East District began its implementation of Plan A, the same year that the two secondary schools piloting the Learning Labs realized a need for more specialized services. The Special Education Department had been actively seeking new ways to integrate special education students with regular classroom students while meeting both their academic and social needs. This integration process appeared particularly difficult at the secondary school level, where few earlier programs were available to model or to provide creative ideas. (NOTE: A more complete discussion of how the Learning Labs meet the requirements of Plan A will be included in a later section.) The evolving Learning Lab concept provided promise for both regular and special education students by:

- (a) providing an integrated environment where students could interact without the necessity of labels or acknowledged differences;
- (b) individualizing instruction to consider each student's academic strengths and weaknesses; and
- (c) giving students who had previously failed in school a chance to experience academic success and emotional support.

During that 1972-73 school year, the combined regular education - special education Learning Lab projects functioned very successfully. This is not to say that there were no problems; it was not easy to de-classify teachers and

students as "regular" or "special education"; the programs attempted to involve too many students; classrooms were not centrally located and tended to become isolated. But these problems were minor--the excitement generated by teachers and students, accompanied by the creative growth observed within the Labs, completely overshadowed the program's youth pains.

It is a fact-of-life of the change process that when an innovation is first implemented, its mere survival is considered an indication of its potential acceptance. As time passes, the innovation is adopted by more people, and any problems or weaknesses are gradually overcome. Eventually the change is no longer viewed as an innovation, but is accepted as an institution, and more constant successes are expected of it.

It is a tribute to the strength of the Learning Lab innovation that in its very initial stages of development, the idea not only survived but was felt by many to be successful. Measurable student academic growth began to occur, and the positive affect generated by both students and teachers toward the Labs became obvious.

It was not surprising, therefore, that eight additional North East schools generated proposals for the creation of Learning Labs for the 1973-74 school year. A number of these schools wrote proposals independently; others requested further information and consultation from Central Office special education personnel. In response to this request, a consultant visited each of the schools and worked with individual school officials in designing ways to establish Learning Labs. It was obvious from the onset that the Labs would differ, based on (a) physical constraints of the building, (b) flexibility of scheduling, and (c) student and teacher characteristics. However, the consultant was able to help school officials determine physical location of rooms, ways of

scheduling teachers and students into the Labs, how to best establish team-teaching situations, and how to select the most suitable types of specialized personnel and materials.

Acceptance of these proposals for funding by the Special Education department was based on agreement by the Principal of each school to not only provide needed Lab physical space and scheduled time, but also to match numbers of participating regular teachers with special education teachers. This latter requirement was considered important in maintaining the Labs as mutual regular education-special education programs, in not only providing for interaction of the areas, but, most importantly, in keeping responsibility for all students under the regular education umbrella, as mandated by Plan A.

During the 1973-74 and 1974-75 school years, a number of modifications have been made in the Learning Labs, although the basic plan has not been changed. It was found, for example, that whereas all students had previously gone to a central location for appraisals, it was far better to appraise students in the school environment. A more organized appraisal process was conducted (as outlined in Plan A), so that only qualified students were entered in the Lab program. In some schools, Learning Labs become centrally located in the schools for better accessibility to school activities.

At the current stage of Lab development, efforts are being made to improve administrative aspects of the program in order to assure optimal coordination both within and between programs. In the 1975-76 school term, emphasis will turn to more careful consideration of improving teaching methods and management techniques through in-service. These are ongoing issues, however, and it is evident at this time that secondary school personnel and students are well pleased with the program.

But a survey such as this, describing the philosophy supporting Learning Labs and tracing their historical development, deals only surfacely with actual Lab components. A more complete discussion of the actual Labs seems appropriate at this point, perhaps best framed within the context of questions frequently asked by teachers and administrators. Some of these questions follow:

1. "What exactly is a Learning Lab?"

The Lab is a team concept including personnel from the Special Education Department and teachers from "regular education" who work together to create an optimal teaching-learning environment for lower-achieving students in one or more subject areas. The Lab itself is the actual room(s) to which students go to receive instruction in academic areas in which they are deficient.

2. "Does the student attend the Lab in place of, or in addition to, his regular subject area class?"

In most schools, the Lab is considered a regular (i.e., English or Arithmetic) class and students are scheduled to attend a particular Lab section in place of a traditional English or Arithmetic class for one class period each day (i.e., 50 minutes). In keeping with this concept, high school students are awarded the same academic credit as if they had attended a regular class.

3. "How does a Lab actually differ from a traditional classroom setting?"

The Lab differs in several ways:

- (a) Both special education and regular education teachers and students are involved;

(b) Instruction is individualized, based on a student's academic and social-emotional level, his learning characteristics, and his learning rate;

(c) More materials and equipment are available;

(d) More team-teaching and team-planning take place.

4. "How is the teaching-learning process conducted in the Learning Lab?"

Ways of structuring the learning situation are limited only by the teacher's imagination. Here are examples of three possible Lab structures:

(a) A team of one regular classroom teacher and one special education teacher may teach in the same classroom with a scheduled group of students. These teachers might divide subject matter to be taught and/or groups of students to be worked with, depending on students' needs and subject matter demands. See Figure 1.

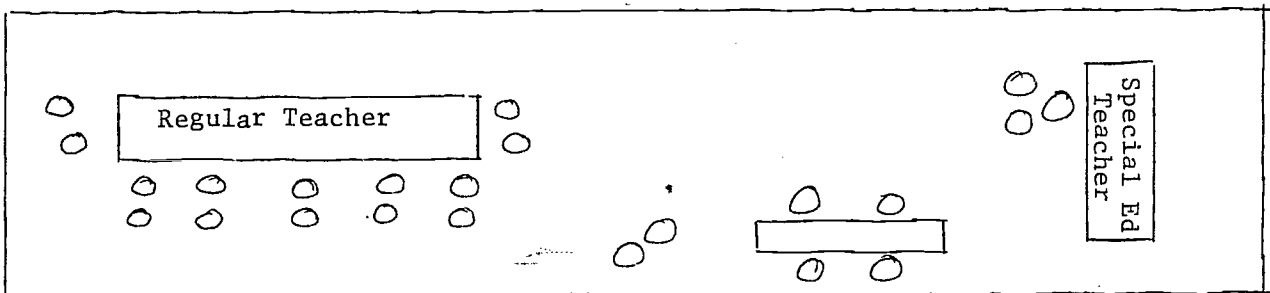


FIGURE 1.

Teachers in the illustrated situation would meet daily during their planning period to share experiences and new ideas, to discuss how well students are learning, and to determine best ways to group students for future teaching and new subject content. They are completely free to reorganize within the classroom.

(b) The regular classroom teacher may teach new subject material to classes of students, while the special education teacher, located in another room provides remedial work for students who need additional help in learning the new material. In this team situation there is a flexible flow in both directions between the two rooms providing students with either new information or remediation as their differing learning styles and rates require. See Figure 2.

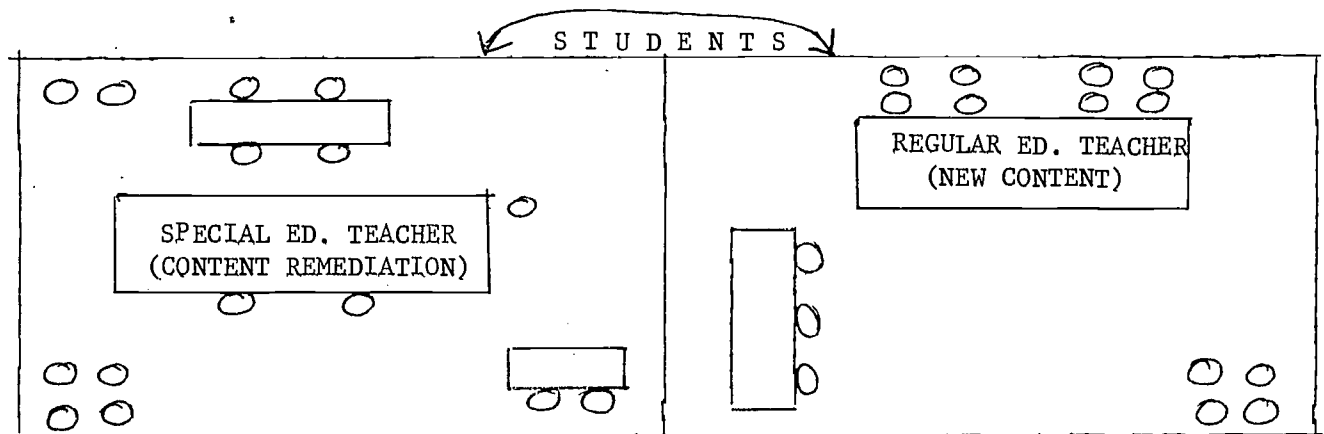


FIGURE 2.

These two teachers would also plan together, with emphasis on which students required remediation and which students were sufficiently competent in subject content to receive additional instruction by the Lab regular classroom teacher.

This type of Lab structure prevents students from losing ground by not understanding basic material on which new concepts are based. Remediation is immediately available so that deficits can be overcome and new material learned.

(c) A third possibility for team teaching can occur when each teacher becomes an "expert" in one aspect of a content area, and teaches only that particular aspect for a given period of time (i.e., several weeks) to an assigned group of students. When students have mastered the material, they move to a new location and begin study in a different content area with another member of the teaching team.

For example, in an English Lab, the team might consist of two regular classroom and two special education teachers; the English subject matter might be divided into four sub-areas including word study, comprehension, rate, and literature. Each teacher would select one of these areas and teach a three- or four-week unit on one aspect of his content (i.e., the "word study" teacher might develop a unit on initial word attack skills). Students would be assigned to one classroom for that unit. At the conclusion of the unit, the students would be assigned to another room to study comprehension or rate or literature. The cycle would continue until all students had received instruction in the four units. The teachers would then begin teaching a new "mini-course" on a different aspect of their content area (i.e., the "word study" teacher might instruct on use of prefixes and suffixes). This particular lab area might be structured as follows:

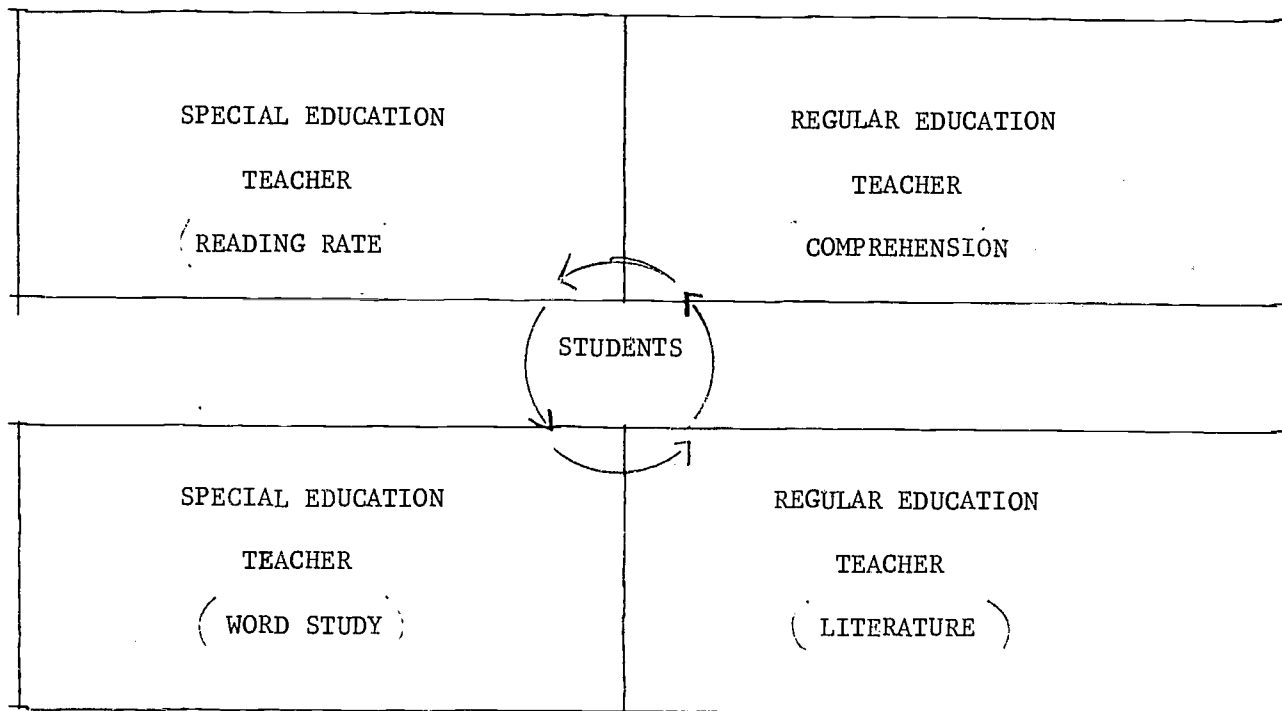


FIGURE 3

It is important to note that, while all teachers plan together regularly to assess student needs and evaluate Lab success, the teacher may structure his individual classroom in any way he feels appropriate, including setting up learning stations to aid in program individualization.

As previously mentioned, the above-described Labs are only examples of many possibilities for Lab structures. Individual schools may vary greatly on these structures depending on particular needs.

5. "In so many team-teaching situations it is necessary to have double classrooms and wide-open space. Can Labs be conducted in older buildings or ones where architecture is very traditional?"

As the classroom examples given in response to the last question indicate, building architecture need not pose a problem. If teachers in two different rooms are sharing a group of students, the classrooms need only be located close to each other. If

double classrooms are available, they too can be adapted to teaching-learning needs. For structural changes necessary within the classroom, portable walls can be purchased or other modifications made without spending a great deal of money.

It is interesting to note that several of the more successful Labs in North East District are conducted in traditionally structured buildings.

A more important consideration appears to be where the rooms are physically located within the building. The rooms should be centrally located so that teachers can conveniently plan together and so that the program appears to be an integral part of the school activities and not necessarily stigmatized as part of Special Education.

6. "Which students should participate in the Learning Labs?"

Although the success of these Labs in the secondary schools has encouraged a few programs to discuss expansion to provide individualized instruction for all students, the Labs currently include only (a) non-special education students functioning in the lower 25% of their class, and (b) special education students classified as LLD, MBI, or Emotionally Disturbed, who are judged capable of profiting from the Lab experience.

This combination of students from regular classrooms and special education is very important to maintaining a program balance. Too much emphasis on one group of students could result either in creating a "basic" track of regular classroom students or in a return to traditional self-contained units for special education students.

Regular education students are selected for the program through consideration of (a) academic history, (b) performance on standardized tests, and (c) informal teacher assessment.

Special education students are placed through the process outlined in Bulletin 711. This process includes the following steps:

- (a) referral by regular or special education teacher to the counselor for review of student academic, social, and emotional status;

- (b) screening of all available information by the teacher, counselor, and an appraisal person;

- (c) placement of student who requires no further testing.

If more test results are necessary,

- (d) the counselor acquires parental permission through a conference with the parent;

- (e) the student is individually tested;

- (f) an Admission, Review and Dismissal (ARD) Committee meeting is held, attended by school personnel directly involved with the student, as well as a school administrator. At this meeting, all available information concerning the student is reviewed and an appropriate placement is determined.

In one middle school, for example, this process proceeds as detailed below in Figure 4. This figure shows that the Labs are viewed as only one alternative in a series of possible placements. These alternative placements will be discussed in response to question #8.

METHODS BY WHICH STUDENTS MAY ENTER RESOURCE PROGRAMS

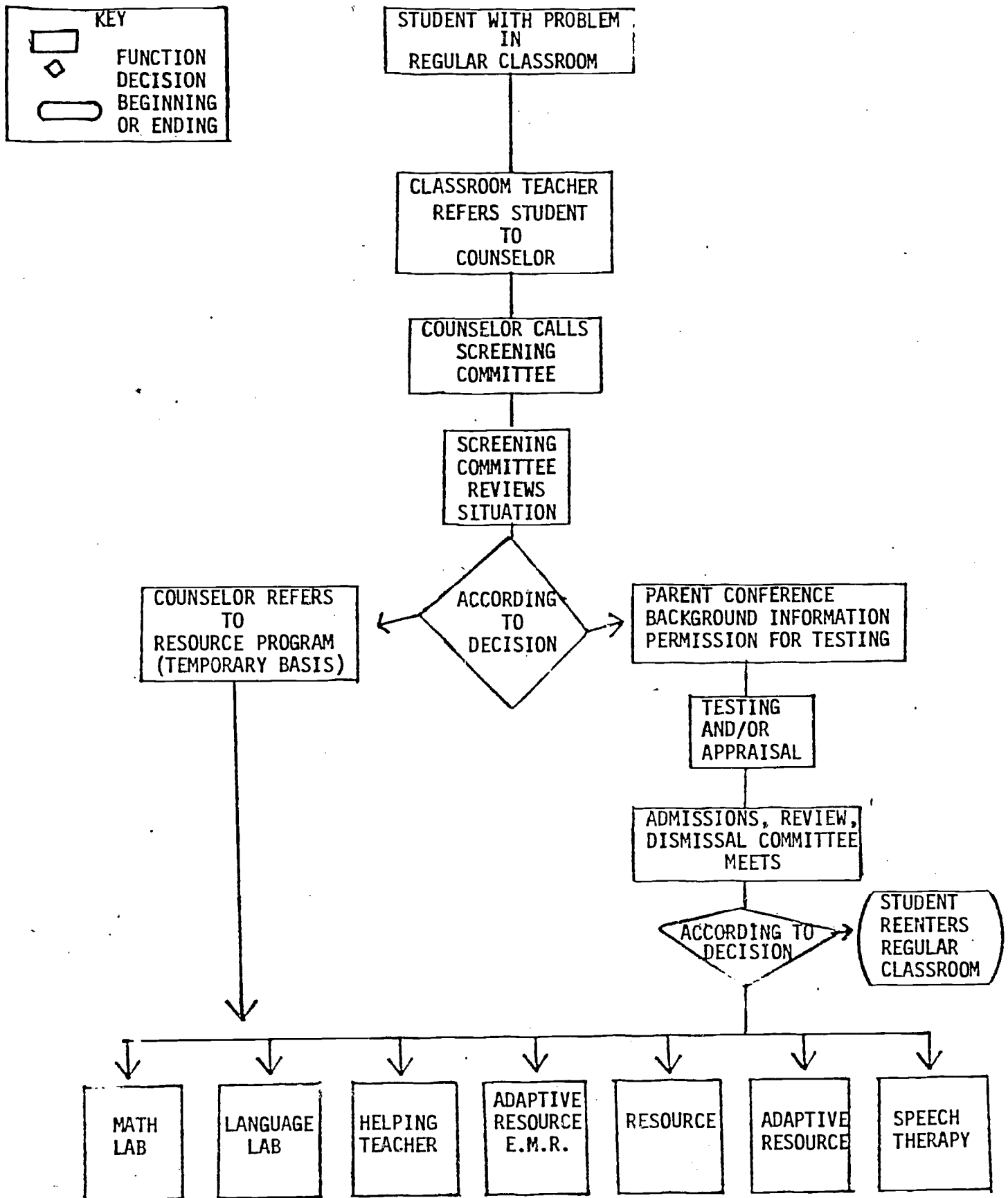


Figure 4.

It should be noted that the main emphasis of the Labs is on academic skills. Students with social and/or emotional problems are included only when their primary difficulty is academic, and when it is felt that they will not be so behaviorally disruptive as to prevent learning by other students. Lab teachers have found that students presenting mild or moderate behavioral problems often positively change their behavior when placed in an academic setting where they can succeed.

7. "How are regular classroom and special education teachers selected to participate in the Labs?"

One of the key requirements of a Lab teacher is flexibility--not only in working with a variety of students, but in accepting new teaching ideas from colleagues. The teacher must also be able to view students as individuals with varying needs, and to design instruction to meet these needs.

In addition, special education teachers are selected on their awareness of strategies for teaching reading, arithmetic, and language arts, and on their ability to deal with students of varying exceptionalities.

Regular classroom teachers selected for the Labs must be aware of more than their content area; they must be able to teach and give emotional support to students deficient in academic skills. It is important that these teachers volunteer to participate in the program and not view such participation as a lowering of their status.

Not all teachers have the flexibility of manner or the interactive skills to work successfully with lower-achieving students. It is important that such teachers, if participating in a Lab program, be permitted to leave the program when the lack of fit becomes obvious.

8. "How necessary are Supportive Services to the Learning Lab Project?"

The Learning Labs cannot exist without a well-formulated system of supportive services. The concept of "supportive service" in North East District includes all specialized personnel who provide support to the regular classroom teacher for students requiring additional assistance. Such personnel may continually deal directly with students (i.e., the Speech Therapist), or may serve as consultants in helping the classroom teacher appropriately program for and manage the student (i.e., Psychologist, Diagnostician).

In any school district, there is an acknowledged group of students whose needs cannot be adequately served in a regular classroom situation because of severe mental, physical, and/or emotional handicaps. Supportive services to any regular classroom program must provide for these students as a priority; for example, such services would include self-contained rooms for multi-handicapped or severely emotionally disturbed students.

The next priority for supportive services is usually considered as programs for the auditorally handicapped, blind, and orthopedically handicapped students who are able to function in a regular classroom environment with the assistance of specialized teachers to aid

both students and regular teachers on a continual basis. These students' needs are immediate and must be met.

At a similar priority level are the Resource programs emphasized in Plan A. These programs are provided for students who require remediation in academic areas such as reading or arithmetic as a support for their functionally remaining in a regular classroom. Resource rooms may provide such remediation on a regular or intermittent basis, dependent on student need. The provision of Resource services forms one cornerstone for the implementation of Plan A, and has therefore recently received priority status in many districts.

Of similar importance to many districts is the existence of Vocational programs which provide work-study experiences for students between the ages of 16 and 21. The VAC program meets the needs of the EMR, MBI, physically handicapped, emotionally disturbed, and LLD students by (a) securing employment for students, (b) supervising student experiences, (c) counseling, (d) coordinating people and agencies to provide a valuable work experience for the student, while permitting him to graduate from high school, and (e) maintaining student records. This program has proved itself invaluable at times in aiding handicapped students' adjustment to and preparation for independent participation in society.

Most districts place a lower priority level on provision of supportive services for students who can participate in the regular classroom with occasional outside assistance by specialists. Such students are usually classified as mildly to moderately slow

learners, LLD, MBI, Speech Handicapped, or Emotionally Disturbed. This is not to say that these students are unimportant; it is to acknowledge that their needs are less immediate than those of the severely impaired and may be less constant in requiring remediation than students in the Resource program.

It is these students who are included in the Learning Lab Project. Some of them may be receiving supportive services outside the Lab itself--such as assistance in dealing with auditory or other physical problems, Resource assistance for remediation, or work-study experience in the VAC program. These services permit the student to continue in the normal school environment by providing for his needs. The Lab provides still another service to these students by conducting classes in new content material with immediate remediation as necessary. The Lab is not meant to replace supportive services; it is intended to provide the intermediate step between student dependence on such services and student independence in a regular classroom setting. This relationship is shown in Figure 5.

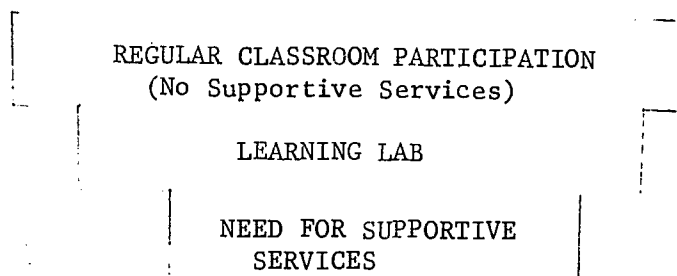


FIGURE 5.

Figure 5 is an adaptation of the "cascade" concept of Evelyn Deno (1973), where the majority of students are viewed as served by the regular classroom teacher, and fewer by supportive services. North East District, through the Learning Lab concept, has made the transition from student dependence on supportive services to regular classroom independence an easier one by providing a setting where students can adjust to regular classroom demands while continuing to "catch up" when necessary.

The point of this discussion is to indicate that supportive services for exceptional students form a necessary base for the Learning Lab, just as they do for regular education.

9. "More specifically, which supportive service personnel participate directly in the Lab?"

In addition to the participation of regular classroom teachers, supportive Lab personnel usually include: a consultant, an educational diagnostician, counselors, a speech therapist, a helping teacher (for intervention with Emotionally Disturbed students), a psychological associate and LLD and MBI teachers. A Vocational Adjustment Coordinator may be included on the high school teams; in some schools, teachers certified to work with the auditorally handicapped, blind, and orthopedically handicapped students also participate.

This is not to imply that the only function of any of these specialists is to participate in the Lab, or that every school assigns all of these individuals to the Lab. Depending on student needs,

varying teams of these specialists have proven effective--team membership must be flexibly organized within any district.

10. "My district derives less money from local funds than does North East. Can we afford the cost of providing a Learning Lab Project on State-allocated units without pulling very much from Local funding?"

Yes. The number of Locally-funded versus State-funded regular classroom units was computed for each of the 10 schools participating in the Lab project, in order to determine Local costs.

The number of Locally-funded units appears below in Figure 6.

<u>Number of Teachers Employed</u>	<u>School</u>	<u>Enrollment</u>	<u>Number of Locally Funded Units</u>
116	A	3048	.5
96	B	2494	1.2
94	C	2477	.4
113	D	2973	0
58	E	1498	.08
49	F	1228	1.34
52	G	1280	2.36
41	H	1044	.33
69	I	1742	1.81
60	J	1513	1.51

FIGURE 6.

The Figure above indicates that in any of the participating schools, the Locally-funded regular units is relatively small. The average number of Locally funded units per school is .95, or less than 1.

From this data, the implication should not be made that this additional unit per school is required by the Lab project. On the contrary, the variety of enrichment programs offered in the North East schools consume this additional unit. (Further discussion of

allocation of regular classroom teachers will be described in a future section.)

In addition to minimal Local funding of regular units, there is no Local funding necessary to supplement Plan A monies for the provision of special education teachers and supportive services. This lack of need for Local funding is particularly significant because North East receives state allocation of Plan A monies at only a 90%, and not a full 100%, level. Therefore, districts funded at a 100% level would have additional units to those noted below.

Excluding self-contained Plan A units, and based on the 95% ADA formula, Figure 7 describes (a) the number of State-funded Plan A units allocated to each secondary school, and (b) the number of units actually used by each secondary school for its special education programming, including the Learning Labs.

SCHOOL CODE	95% ADA	STATE-FUNDED UNITS**	UNITS ACTUALLY EMPLOYED**
A	2896	12.93	8
B	2369	10.56	6
C	2353	10.50	6
D	2824	12.61	6
E	1423	6.35	7
F	1167	5.21	6
G	1216	5.43	6
H	992	4.43	6
I	1655	7.39	8
J	1437	6.42	7
TOTALS	18,332	81.83	66

FIGURE 7.

** NOTE: Self-contained units have been considered in initial calculations and are not included here.

Figure 7 indicates that fewer of Plan A units are actually employed in the secondary schools than are funded by the State. The remaining units are utilized in programs such as Homebound and in the elementary schools.

This use of more Plan A units in the elementary than in the secondary school will be discussed in response to question #12. Although currently under change in North East District, this policy is traditionally favored in many districts. Figure 7 above demonstrates that the Learning Lab program can be conducted in school districts where fewer Plan A units are used in the secondary schools with the surplus of units still being used in the elementary grades.

An important base for the placement of units is the flexibility permitted by Plan A: while units are equitably allotted for all levels, districts may individually determine where their needs are greatest and distribute these units accordingly.

The fact that the Learning Labs do not require additional funding surprises many districts, because they assume that additional programming requires additional funds. It is important to realize here that the Learning Lab is more of an alternate than an additional program.

Plan A State-funded teachers who might otherwise be dealing with only LLD or MBI students also teach regular, but lower academic, students usually taught only by regular education teachers.

Similarly, regular classroom teachers instruct special education students with whom they normally would have had no contact.

This team approach is an alternative to standard self-contained units for both regular and special education personnel. Because Special Education teachers can effectively teach more students in this setting than previously, there is no need for additional Local money to supplement regular classroom units.

11. "But isn't the regular education program, in effect, losing a few of their classroom teachers to the Lab Project?"

No. To reiterate, there are a large number of regular education students participating in the Lab Project: these students would have to be taught by regular classroom teachers in any case if the Labs were not available. Since special education teachers are teaching regular education students as well as their own, there is no basis to the argument that regular education students and teachers are not benefiting from the Project.

12. "Why is so much attention given to remediating secondary students in the Labs when preventing academic problems, through elementary school programs, seems more logical?"

The "logic" of the above-described practice is not evident in the 1973-74 Annual Special Education Statistical Report prepared by the Texas Education Agency. According to the TEA, a compilation by all school districts in Texas indicates the following facts:

Fact 1: There are currently 6,485 students in secondary schools enrolled in the regular educational program who need special education services which are not being provided.

Although there are also a large number of elementary students requiring services, totally fulfilling the needs of elementary special education would not erase the moral and educational obligation school districts have for providing services for secondary students.

Fact 2: Of the 6,485 secondary students without existing services, 3397 are classified as LLD, 237 as MBI and 415 as ED. The Labs exist to help these three categories of students in combination with the higher numbers of slow-learners on whom there is no exact count, and for whom both regular and special education often deny responsibility.

Fact 3: Although there are 2.5 times as many elementary as secondary school LLD students, a larger number of secondary LLD students were "dismissed from special education classes because of lack of educational services to meet the students' needs." Similarly, while there are one-half as many secondary as elementary MBI students, an equal number of secondary students are without services. And while there are three-fifths as many ED students in the elementary as in the secondary schools, over four times as many secondary students were dismissed from special education classes because of lack of programming. In all three instances, the need is blatantly there, but it is not being met.

The inequity evident in the TEA report can be overcome by providing quality programs to meet secondary students' needs. Extremely few

such programs currently exist; instead, school districts constantly allocate more of their units to the elementary levels.

In order to more evenly distribute all Special Education personnel, North East District is moving towards the following allocation procedure for the 1975-76 year:

- (a) The total number of district-wide Plan A units is noted.
- (b) From the total, those units are subtracted which are used on a district-wide basis without assignment to a particular campus. This would include, for example, personnel in the homebound program.
- (c) The percentage of the total number of district students at each school is then computed.
- (d) This percentage indicates the percentage of total teachers allotted to any particular school.

This computation does not have to be inflexible, since the number of teacher assignments can still be adjusted to meet greatest student need. On the other hand, too great a degree of teacher reassignment might result once again in a lack of programming equity.

13. "How should special education teachers be assigned within schools so that programming is included for students with all types of exceptionalities, as well as those requiring a Lab situation?"

Scheduling decisions within schools are based on priorities given to different levels of student need, as discussed earlier in response to question #8. If there are a large number of severely

impaired students in any particular school, teachers might be assigned to these students on a priority basis. (However, any great number of such students in one location would require consideration for additional units on a district-wide basis). Similarly, students requiring supportive services such as those for the auditorally impaired, orthopedically handicapped, or Resource room, would receive priority in programming.

It has been found in North East District that services given to students in the Lab projects often replace special education teacher responsibilities in other areas. On this basis, it has not been uncommon to discover that two-thirds of the special education personnel allotted to any one school can participate at least partially in the Lab project. For example, the setting provided in the Lab often decreases the number of students who need to participate in the Resource program. With this smaller student load, the Resource teacher can then work individually in the Resource capacity for one-half day, and spend the remainder of the day teaching in the Lab or serving as a Helping Teacher.

Since Plan A allows a great deal of flexibility in division of personnel responsibilities, and the Lab tends to lessen numbers of students in other categories with which personnel are involved (i.e., LLD, MBI), more time can be spent with Lab involvements and such personnel can be regularly scheduled into the Labs. Inclusion of a speech therapist, a helping teacher, a Resource teacher, a VAC, or a teacher of the physically impaired need not be seen as a luxury, therefore, but as a change in normal teacher scheduling patterns.

Further flexibility occurs through the Plan A provision that a certified Special Education teacher can work with any category student, provided that the teacher is working to improve his skills in the new area. Special Education teachers with a variety of teaching proficiencies may therefore participate in the Lab, unrestricted by their particular categorization.

14. "With such a variety of teachers participating in the Labs, isn't computation of a master schedule very difficult?"

Not really. In North East District, the same series of steps are followed in creating a master schedule in each Lab school that are followed in non-Lab schools. These steps, generally described, include:

- (a) determination of all program offerings, including required subject areas;
- (b) determination of electives;
- (c) examination of degree of student demand for each of these offerings, in order to derive the number of sections necessary for each course;
- (d) consideration of teacher allocations for these course offerings, based on the State formula;
- (e) consideration of total number of class periods;
- (f) consideration of space allocations and limitations;
- (g) subsequent creation of a "conflict chart" to list when the majority of more popular courses are being offered, so that conflicts do not occur with other courses.

Optimally, the Lab is included in the initial stages of this scheduling process. It is considered to be another program offering in which a student might enroll, instead of, for example, tenth grade English. The number of students participating is projected into the schedule and this number is balanced by division into sections offered throughout the day. Lab sections, similar to required academic subjects, are scheduled during prime time.

Since the Lab students are not participating in regular English sections (or Arithmetic, or in some schools Science and Social Studies), there will be a surplus of regular classroom teachers (or Resource or Helping Teachers), beyond the number necessary to meet State requirements. These "extra" teachers can then be assigned to the Labs.

Once major scheduling decisions have been made, selection of which specific regular classroom teachers are to be scheduled to the Lab can be based on suitability of teacher personality, expertise, and desire to work with Lab students.

North East schools have found that, wherever possible, Lab teachers forming a team should be scheduled with the same planning periods and in nearby rooms.

15. "Who provides the leadership for each Lab?"

Although approval for the creation of a Lab comes from Central Office personnel and each building principal, there is a real need for daily coordination and leadership. This role is fulfilled by two people: the Team Leader and the Consultant.

The Team Leader is a teacher in each Lab project who, in addition to lightened teaching responsibilities, (a) works with the teachers in academic programming; (b) coordinates all supportive personnel involved in the project; (c) helps solve teaching-learning problems; (d) is involved with the school principal in selection of all teachers to participate in the Lab; and (e) coordinates maintenance of eligibility folders for Plan A students in the program. In other words, the Team Leader is the "on-the-scene" program organizer.

The Learning Lab Consultant serves as a liaison person between each school and the Central Office. Primary responsibilities include (a) staff development; (b) continual assessment of the needs of both teachers and students by visiting individual schools weekly and meeting with teams to discuss problems that cannot be solved by Team Leaders; (c) disseminating information from the Central Office to the team or Team Leader; and (d) supporting the Team Leader wherever possible. The Consultant is in a staff, rather than a line, position, and therefore does not have administrative power over the Team Leader or teachers. This position enables him to be viewed as non-threatening to team members.

Having a Team Leader and a Lab Consultant does not require the allocation of any additional personnel: the Team Leader is one of the team teachers, and the Consultant fulfills the Supervisor's role, as is required in Bulletin 711.

16. "How well do the Learning Labs meet the Special Education requirements outlined in Bulletin 711?"

Because North East District is committed to Plan A and because so many Plan A students participate in the Lab Project, the need was felt, from the initiation of Special Education involvement, to design the Project in such a way as to optimally fulfill Plan A requirements.

Therefore, student eligibility requirements are carefully determined; parent permission is obtained for testing, physical examinations, placement, and data use; the Placement process outlined in Bulletin 711 is followed, including the use of ARD committees; teacher certification requirements are met; re-evaluations are conducted; and eligibility folders are maintained on all Plan A students.

It is in no way more difficult to meet Plan A requirements within the context of Learning Labs.

17. "How much teacher planning time is required to conduct the Lab?"

One planning period a day is allotted to Lab teachers; scheduling should allow all teachers to have the same period so that team planning is possible.

Experience in North East has shown that when a school is initiating a Lab, teachers need to be able to plan together for a minimum of several months in the prior school term (or during the summer, if funds allow), so that a cohesive long-term program can be developed. Once the school term begins, much planning is on a more immediate basis.

18. "How can I create Learning Labs in schools in my district?"

In order to create effective Learning Labs, there are a series of

steps which should be followed:

(a) The district must first decide where it wishes to place priorities on types of Special Education units (i.e., number of self-contained TMR units necessary) and where Special Education units are to be located (i.e., Elementary vs. Secondary schools).

The purpose of the Labs should be philosophically viewed as an attempt by each school to take care of its own special population of students.

(b) Once a commitment has been made by the district to the Lab concept, one Pilot Lab should be established so that it can serve as a model for later Lab expansion within the district. The Pilot should be initiated through contact with the building Principal; such initiation of contact and subsequent planning should take place during the school year prior to the year in which the Lab will actually begin.

(c) The Principal in the Pilot school should then work together with a Central Office Special Education Consultant and academic department heads to discuss program emphasis. During these discussions, the primary focus of the Lab should be seen as an attempt to keep Lab students within the mainstream of regular education and to program for a student individually, on the basis of need rather than categorization.

(d) These individuals should select a Lab Team Leader, preferably with Special Education qualifications, to coordinate Lab development. This individual should be knowledgeable, flexible,

and able to interact well with other teachers.

(e) The Team Leader, working closely with the Principal, Special Education Consultant, and department heads should begin defining the general objectives of the Lab, based on consideration of the school's unique needs.

(f) Regular classroom and special education teachers who will formulate the Lab team should next be selected. These teachers must be flexible in teaching style and should have a similar teaching philosophy in order to optimally work together.

(g) Both long-term and short-term Lab goals should be stated by team members. To assist in goal development, they might (1) discuss program philosophy with the Special Education Consultant and building Principal; (2) receive in-service training on Plan A and the Lab concept.

(h) The scope of the Learning Lab for the initial year should then be established in order to generate a comprehensive proposal for Lab creation. The following issues must be considered:

1. Criteria identifying students to participate (i.e., lower 25% percentile in achievement level; LLD; MBI). A rule should be established at this point to clarify the number (or percentage) of special education vs. regular education students who are to participate;
2. Procedures for moving students back into the regular classroom;
3. Academic subjects to be included (i.e., reading, language arts, math, social studies);

4. Grade levels to be included;
5. Actual number of students who can be taught in the Labs: it is best to start off with a smaller, more manageable number the first year;
6. Physical facilities currently available or which can be altered to meet Lab needs;--such facilities should be centrally located;
7. The type of grading system to be used in evaluating student performance.

(i) Based on decisions made regarding the above issues, the Pilot school should generate a brief proposal to outline the Project for approval by the Central Office.

(j) In order to provide excitement regarding the program and to broaden awarenesses of Team members, they should be given time to visit other schools; and attend meetings and conferences for ideas on Lab organizational structures that have proven effective. They should also be encouraged to attend materials demonstrations by publishing companies. This awareness-building should not be restricted only to the planning year, but should continue after the Labs have been established.

(k) The Team members should next outline the Lab curriculum and identify necessary materials, allowing for flexibility of change when individual student needs are actually observed.

(l) Procedures for identifying Lab students should be more specifically determined. All rules and regulations of Bulletin 711 must be followed. Meetings should be held with counselors

to point out that students are not to be arbitrarily placed in Labs, that students presenting severe discipline problems are not to be included.

North East District has found that individual student appraisal is necessary, and that academic or physical evaluations are most accurate and easily accomplished at the school, rather than at any appraisal center.

The school Principal might send one letter to the parents requesting permission for (1) physical and/or academic evaluation, (2) Lab placement and participation, and (3) data use.

(m) Once the Lab begins, team members must provide ongoing individualization of instruction and evaluation of student performance. Remediation should be provided wherever necessary, and when it is felt that a student is ready to fully participate in a regular classroom, he should be released from Lab involvement.

(n) It is important to periodically provide stimulation in the Lab setting so that excitement regarding the Lab will not fade. Such stimulation can occur through exposure of teachers to new ideas by provision of in-service training and visits to other settings.

North East officials have found that requiring a Lab school to submit a new Lab proposal each year causes Team members to (1) re-examine their program; (2) try new ideas, and (3) feel some competition with other schools.

19. "What materials would North East Lab teachers suggest as most helpful in the Learning Labs?"

North East teachers have compiled the following list of materials for use in the Labs. However, the extensiveness of the list is not meant to cause any district to feel that it cannot afford the following equipment and materials. North East District has found that little Local-fund expenditure for these items is necessary if

- (a) the Plan A Special Materials Fund allotment of \$225.00 per year for each special education teacher in the Learning Lab is not meted out separately to teachers, but is combined for all teachers in the program for a period of one to three years. This combined sum will be large enough to purchase the majority of these items;
- (b) Title III material funds are optimally used wherever applicable;
- (c) Teachers are advised on the use of Special Education Instructional Materials Centers (SEIMCs).

EQUIPMENT

Tape Recorders
Listening stations/headphones
Record players
Overhead projector
Study mates (individual filmstrip projectors)
Film strip projector
EDL Controller readers/films and workbooks
Tachistoscope/films and workbooks
Reading accelerators
Calculators
Language Master

KITS AND PROGRAMS

Write to Communicate (Reader's Guide)
Specific Skill Series (Barnell-Loft)
Reading for Concepts (McGraw-Hill)
Dimensions in Reading: Manpower & Natural Resources (SRA)

KITS AND PROGRAMS (continued)

Tactics in Reading I & II (Scott Foresman)
Laboratory Approach to Mathematics (SRA)
Scholastic Action
Bowmar Reading Incentive Series
Durrell Murphy Phonics Practice Program
SRA Reading Lab I Word Games
Ginn Word Enrichment Program
SRA Reading Lab
Readers Digest Reading Skill Builder
Code 78
Situational Math

MULTIMEDIA PROGRAMS:

Wordcraft I and II (Reading Laboratory)
Situational Language (Knowledge Aid)
Listen-Look-Learn Reading Tapes and Cassettes (Ideal)
Listen and Think (EDL)
Audio Reading Progress (EPC)
Clues to Reading Progress (EPC)

BOOKS AND MAGAZINES:

Libraries of high-interest/low-reading level books (Pendulum books,
Scholastic Reluctant Reader Libraries, Pal Paperback Kits, etc.)
High-interest novels in class sets (That was Then, This is Now; Mrs. Mike, etc.)
Scope and Voices magazines (Scholastic)
Newspapers
Current popular magazines
Libraries of high-interest/low-reading level books
Morgan Bay Mysteries Field Ed Pub., Inc.
Kaleidoscope Readers Field Ed Pub., Inc.
Deep Sea Adventure Series Field Ed Pub., Inc.
Checkered Flag Series Field Ed Pub., Inc.
Jim Forest Series Field Ed Pub., Inc.
Pacemaker Classics Fearon Publishers
McCall-Crabb Series
Practice Readers
Linguistic readers - SRA, Merrill
Scholastic magazines
Scope Literature Contact Units

WORKBOOKS:

Wide World, Dimensions, Spotlight, Spring, etc. (Scholastic)
Spelling Generalization (Ideal)
Spelling Levels 1-8 (Laidlow)
Phonic & World Analysis Skills, Grades 1-5 (Continental Press)
Consonant Sounds and Vowel Sounds (Milton Bradley)
English 2600 (Programmed Grammar series)
Troubleshooters I & II (Houghton Mifflin)
Reading for Understanding (SRA)

WORKBOOKS (continued)

Reading Attainment Systems I & II (Grolier)
ACE program (Scott Foresman)
Go workbook and activity sheets (Scholastic)
Activity Kits (Scholastic)
Gateways to Correct Spelling (Steck-Vaughn)
Be a Better Reader 2, 3, 4 (Prentice-Hall)
Success in Language and Literature A, B, and C (Follett Publishing Company)
Basic Essentials of Math I and II (James T. Shea/Steck-Vaughn)
Patterns and Discovery (Fractions; whole numbers) (Addison-Wesley)

GAMES:

Password
Scrabble
Spill and Spell

20. "What does research demonstrate concerning the effectiveness of the Learning Laboratory Projects?"

Because prior research into alternative classroom settings such as the Learning Labs is so extremely limited, during the 1974-75 school year North East Independent School District conducted a research study concerning Learning Lab effectiveness. In this study, North East Learning Lab students were compared with matched students in control districts without Learning Labs on changes in both academic and affective behaviors.

The following is a description of (I) the rationale for the research, (II) the research problem and hypotheses, (III) a review of related research and literature, (IV) data collection and analysis techniques, (V) analysis results, (VI) conclusions.

I. The Rationale

The concept of normalization of exceptional children (Wolfensburger, 1972), with emphasis on educational mainstreaming, is not new to special educators--and has become increasingly important to regular educators. The discussion of benefits of integration versus segregation, spotlighted by Dunn (1968) and underscored by a plethora of efficacy studies dealing particularly with retarded children, is now "old hat"--conclusions such as those by Johnson (1962) have prompted a number of states to re-examine their educational placement of not only the retarded, but of all exceptional children:

"It is indeed paradoxical that mentally handicapped children, having teachers especially trained, having more money (per capita) spent on their education, and being designed to provide for their unique needs, should

be accomplishing the objectives of their education at the same or at a lower level than similar mentally handicapped children who have not had these advantages and have been forced to remain in the regular grades (p. 66)."

Such a re-examination of educational placement has led to major restructuring of Special Education in Texas. Based on the combination of a desire for cost-effectiveness and a moral commitment to assure an appropriate education for all children in preparation for participation in the economic and social mainstream, "Plan A" has required Texas school districts to program for all children and to educationally integrate exceptional with "regular" children wherever possible.

In implementing Plan A, it has been easier for most Texas districts to integrate elementary than secondary students. Secondary administrators tend to respond negatively to the low staffing ratio which is generally more acceptable to elementary administrators; non-severely impaired younger exceptional students often deviate less from "regular" peers than do older students; the younger students' response to their handicap may be less strong; their teachers tend to be more child-oriented and less content-oriented than secondary teachers, perhaps better preparing them to deal with individual student differences.

However, the greater ease of program implementation in elementary schools does not obviate needs of secondary-level exceptional students. As noted earlier, the Texas Education Agency has compiled the following statistics for the 1973-74 school year from data recorded across all Texas school districts:

- (1) 6,485 secondary students enrolled in the regular education program were acknowledged as requiring special education services which were not available;

- (2) There were 2.5 times as many elementary as secondary LLD students; however, more secondary than elementary LLD students were dismissed from special education classes due to the lack of services available to meet students' needs.

Although there were one-half as many secondary as elementary MBI students, an equal number of secondary students did not have services available to them.

And while there were only three-fifths as many ED students in the elementary as in the secondary grades more than four times as many secondary students were dismissed from special education because no services were available.

These facts establish the need for more extensive and more effective programming at the secondary level--yet little is currently being done. It is this acknowledged need for provision of special education services within the mainstream of regular education which has caused North East District to develop the Learning Laboratories described earlier in this report.

II. The Research Problem and Hypotheses

An important part of the implementation of the Learning Laboratories has been an evaluation of their effectiveness by examining whether participant students' academic and affective behaviors are improved to a greater degree than are non-participant student behaviors. This evaluation formulates the basis for this research study.

A. The Problem

(1) During the period of one school year, do students participating in a Learning Laboratory demonstrate greater positive change scores on standardized tests of reading and arithmetic than matched students not participating in a Learning Laboratory?

(2) During the period of one school year, do students participating in a Learning Laboratory demonstrate fewer school (a) absences, (b) referrals, (c) suspensions, (d) expulsions, and (e) drop-out occasions than matched students not participating in a Learning Laboratory?

B. Hypotheses

H_1 : At the end of one school year, sixth to eighth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement test than will matched students not enrolled in a Learning Laboratory.

H_2 : At the end of one school year, sixth to eighth grade non-special education students enrolled in a Learning Laboratory

will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than with matched students not enrolled in a Learning Laboratory.

H₃: At the end of one school year a combined group of sixth to eighth grade LLD, MBI, and non-special education students enrolled in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

H₄: At the end of one school year, ninth to twelfth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

H₅: At the end of one school year, ninth to twelfth grade non-special education students enrolled in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

H₆: At the end of one school year, a combined group of ninth to twelfth grade LLD, MBI, and non-special education students in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

H₇: At the end of one school year, sixth to eighth grade LLD and MBI students enrolled in a Learning Laboratory will demon-

strate a smaller number of school (a) absences, (b) referrals, (c) suspensions, and (d) expulsions than will matched students not enrolled in a Learning Laboratory.

H₈: At the end of one school year, sixth to eighth grade non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, and (d) expulsions than will matched students not enrolled in a Learning Laboratory.

H₉: At the end of one school year, a combined group of sixth grade LLD, MBI, and non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, and (d) expulsions than will matched students not enrolled in a Learning Laboratory.

H₁₀: At the end of one school year, ninth to twelfth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, (d) expulsions, and (e) drop-out occasions than will matched students not enrolled in a Learning Laboratory.

H₁₁: At the end of one school year, ninth to twelfth grade non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, (d) expulsions, and (e) drop-out occasions than will matched students not enrolled in a Learning Laboratory.

H₁₂: At the end of one school year, a combined group of ninth to twelfth grade LLD, MBI, and non-special education students enrolled in

a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, (d) expulsions, and (e) drop-out occasions than will matched students not enrolled in a Learning Laboratory.

III. Review of the Literature

The creation of Learning Laboratories is based on an acceptance of the educational philosophy of integrating special education students into the mainstream of regular education. It is not the purpose of this review to examine the results of each of the large number of efficacy studies which have been conducted in the last 40 years; however, some general conclusions from these research results appear in order.

The early efficacy studies comparing mentally retarded students in regular classes with those in special classes in the same school system found that special education students were academically inferior, but comparable or superior on class adjustment and personality measures (Kirk, 1964). However, it is widely acknowledged that these studies were biased in favor of regular education classes, because students had not been randomly placed in special or regular classes. Those students who initially had shown the most academic promise had remained in regular education. The results were predictable from the onset. There has also been much discussion of the inadequacy of instruments used to measure student adjustment and personality in these earlier studies.

Subsequent efficacy research attempted to overcome these earlier failings. Blatt (1958) and Cassidy and Stanton (1959) compared special education students in one district with matched regular education students in another district which had no special education classes. Blatt (1958) reported no significant differences between groups in achievement, while Cassidy and Stanton's (1959) results reported higher achievement by students in regular classes.

In a carefully designed study, Goldstein, Moss and Jordan (1965) randomly assigned matched groups of retarded children to regular or special education classes as they entered first grade. Curricula were standardized and instrumentation was superior to that used in earlier research. When I.Q. gains and academic achievement levels were examined four years later, no significant differences were found between overall groups as a result of placement. However, it was concluded that low-I.Q. students (below 81) benefitted more academically from a special education classroom, while high-I.Q. students benefitted from regular class placement. In examining results of a self-contained versus an integrated placement of secondary students, Skodak (1970) reported that students in the integrated program (a) had better school attendance records; and subsequently (b) held fulltime jobs and were at a higher occupational level more frequently than non-integrated students; (c) earned more money; and (d) were more likely to seek further education, manage money with greater prudence, take part in more community activities. The results of other studies (Kirk, 1964; Hoelke, 1966; Smith and Kennedy, 1967) suggest that exceptional students make as much or more progress in the regular classroom as they do in special education.

While the majority of efficacy studies have dealt with the mildly retarded, Zedler (1968) compared language and learning disabled students randomly assigned to special or regular education classes. She concluded that LLD students assigned to regular classes performed significantly better than special class students in reading, spelling and arithmetic, and that they demonstrated a gain in I.Q. points, while special class students suffered a loss. And Rubin, Senison and Betwee (1966) reported that emotionally disturbed students performed as well

in regular as in special education classes.

In considering research conclusions, Dunn (1968) notes, "Evidence such as this is another reason to find better ways of serving children with mild learning disorders than placing them in self contained special schools and classes."

Conclusions such as Dunn's (1968) have led many educators to accept a philosophy of "normalization" in schools--the belief that handicapped individuals should be included and supported in as integrated and as inclusive a manner as possible, that segregation of anyone other than the extremely impaired should be avoided. While this philosophy emanated from and has reached widespread acceptance in Scandinavia and is currently widely advocated in Toronto, its American adoption has been much slower (Wolfensburger, 1972). Some states, such as Texas and Nebraska, have been mandating educational policies based on integration with the hope that these policies would expand to more normalized experiences for the handicapped.

At the core of the normalization philosophy in education is a belief in the non-labeling of students, of planning for each child on the basis of his learning needs and characteristics, rather than on the basis of a category or classification. This non-labeling policy is important because as Larsen (1975) notes,

"The fact that some youngsters are labeled handicapped has been shown to be a significant factor in the way in which these children interact with either regular or special class teachers. Not only does the label affect teacher perceptions and expectations, but it has also been demonstrated to create stereotypes which can be detrimental to the academic and/or social development of particular children. Stereotyping of certain children has been

found to exist even with teachers who have been trained in special education (p. 9)."

Support of this statement appears in a study by Salvie, Clark and Ysseldyke (1973), who examined the reactions of undergraduate students in both regular and special education when they encountered intellectually normal students who had been mislabeled. Subjects were divided into three groups and were shown the same videotape of the behaviors of a normal child. They were asked to rate the behaviors of this child in five categories (i.e., attitudes towards tasks). The first undergraduate group was told that the child was normal, the second was told that the child was gifted, and the third that he was retarded. Results showed that children labeled "gifted" were viewed more positively than children labeled "normal" on attitudes toward task and toward own performance. On all dimensions children labeled as retarded were viewed less favorably than those labeled as normal, even by those undergraduates trained in special education.

However, support for a philosophy of normalization by the integrating and non-labeling of students does not imply that all mildly handicapped should immediately be placed in regular classroom without assistance. For it is more and more frequently acknowledged that removing students from a self-contained environment and immediately placing them in a regular classroom setting with no intermediary step(s) causes a "culture shock" which finds both teachers and students ill-prepared to deal with the new situation.

As Groesnick (1971) suggests, the longer that a student remains in a self-contained special education classroom, the more difficult his reintegration into regular education. Quay, Galvin, Annesley and Werry (1972) studied achievement levels of emotionally disturbed students in a carefully structured

resource room (based on Hewett's "engineered classroom") and considered their simultaneous academic progress in the regular classroom. They found that while both student attending behavior and academic achievement improved in the resource setting, similar gains were not carried over into the regular classroom setting. They concluded

"...conditions in the regular class clearly must be changed to support behavior learned in the resource room. It is unlikely that such changes can be brought about by the limited contact which occurs between resource room staff and the regular class teachers...(p. 195)."

As Quay, et al. (1972) suggest, even the resource room, often viewed as the necessary step between self-contained and regular classroom participation, is not enough. An environment is necessary where exceptional students can be treated as individuals with differing needs and learning styles, and where regular classroom teachers can, in effect, be trained to work and interact with these students. As Martin (1974), Deputy Commissioner for Education of the Handicapped, voices:

"I am concerned today... about the pell-mell and I fear naive mad-dash to mainstream children....First, it is the question of the attitudes, fears, anxieties, and possibly overt rejection which may face handicapped children, not just from their schoolmates but from the adults in the school....If the majority of handicapped children--the mildly and moderately retarded, the children with behavioral disorders, the children with language and learning problems, the children with orthopedic difficulties--are to be spend-

ing most or much of their time in regular classrooms, there must be massive efforts to work with their regular teachers, not to just instruct them in the pedagogy of special education but to share their feelings, to understand their fears, to provide them with assistance and materials, and in short, to assure their success (pp. 151-152)."

A major aspect of the problem appears to result from the time-honored view that special children should be the sole responsibility of special education, and that regular educators need not become involved with other than normal children. Within the increasingly popular integration philosophy, there is no room for such easy dichotomization, however. In states such as Texas, where availability of state monies is based on special education students becoming part of regular education, non-special education teachers are forced to become more aware of the needs of exceptional children. As Bruininks (1973) states, the previously ambiguous delineation of roles between special educators and general educators can no longer allow general educators to abdicate responsibility for mildly impaired students.

To support the feasibility of favorable regular classroom-special education teacher-student interaction, Klinger (1972) describes the Texas "Shift of Emphasis" project, where 83 primary grade teachers from 25 school districts were trained in specific teaching strategies, commercially made and "teacher made" teaching materials, and methods to be used in classroom management and scheduling. These teachers identified a total of 300 of their students whom they had maintained, but who normally would have been placed in self-contained special education classes.

An evaluation was later conducted concerning academic success of target students, nature of teacher-student interactions, and presence of deleterious effects of target students on academic performance of "normal" students. Results showed that whereas target students had initially been negatively viewed by both teachers and normal peers, over a period of months, this negative response was lessened. Many teachers showed themselves capable of altering teaching strategies to successfully include target students. In addition, achievement test scores for normal students in project classrooms did not differ significantly from scores of students in non-project classrooms.

However, the adoption of Plan A does not mean that all mildly impaired are now the concern of regular educators, thus removing special educators from this responsibility. As Deno (1972) describes, special education can now adopt the new role of conducting itself "...as a tool for developing more effective instructional approaches for the hard to teach in regular as well as special education." She notes that special education is in an excellent position to prompt change in general education because it has gained insight into what causes students to fall out of the "model" system and how to teach these students. Therefore, even with the mildly impaired, special educators will optimally work together with regular educators in programming for exceptional students in the educational mainstream.

The above-discussed concepts of (a) special student integration, (b) non-categorization, (c) provision of alternatives to either self-contained or regular class placement, and (d) interaction of regular and special education teachers, from the core of the Learning Laboratories in North East Independent School District. It has been the purpose of this research project to determine the effectiveness of actualizing these concepts.

IV. DATA COLLECTION AND ANALYSISA. SAMPLE

Over 3,000 students participated in this research. Experimental students were selected on the basis of participation in a Learning Lab Project in one of five randomly selected schools in North East Independent School District, San Antonio, Texas. Control students were selected from the four following independent school districts: East Central ISD, San Antonio, Texas; Judson ISD, Converse, Texas; Fort Bend ISD, Stafford, Texas; and Schertz-Cibolo-Universal City ISD, Schertz, Texas.

Basis for control group selection was fitness of match with North East experimental subjects by (a) grade level; (b) Special Education code classification (e.g., MBI); (c) sex; (d) age; and (e) I.Q.. (A complete description of procedures followed in matching experimental and control students appears in Appendix A.)

B. PROCEDURES

In July, 1974, North East Special Education officials met with officials of control schools to fully explain the goals of this research project and to obtain permission for students in their schools to participate in the study.

In August, a form was designed on which school officials were to record demographic, achievement, and affective data on all students in the North East Independent School District. (This form appears in Appendix B.)

A North East administrator then met with the ten Learning Lab Project leaders and described the manner in which the demographic section of the data form was to be completed; this included information on age, sex, I.Q., and code classification. The leaders subsequently returned to their schools and completed these forms for every student enrolled in the Labs. When demographic data were recorded, all North East students were assigned an identification code number in order to provide for student anonymity in future data use.

Because of difficulties anticipated in accurately matching the large number of North East students in control schools, a decision was made to involve students from only five of the North East projects in this research. These five schools were randomly selected from the total group of ten schools.

The coded demographic data on each North East student was then forwarded to a designated individual in each control school who subsequently matched students in their school to each North East student by age, sex, I.Q., and categorization (e.g., MBI, LLD, non-Special Education). None of the control students participated in Learning Laboratory experiences.

In early September, a planning session was held for Laboratory Team Leaders in North East District to delimit student achievement testing procedures. Tests were administered during the week of September 16, 1974. In all rooms, standardized directions and timing were followed on the Stanford Achievement Test, 1973 Edition; middle school students were administered the Primary III Battery, and the high school students, Intermediate I. Form A was used in pretesting, and the following subtests were administered to all students; Reading Comprehension, Word Study Skills, Math Concepts, Math

Computations, and Math Application. Completed tests were forwarded to Harcourt, Brace, Jovanovich Publishing Company in New York, where they were machine-scored.

In October, meetings were held with designated individuals from each of the control schools, where achievement testing procedures were explained. Tests were administered to control students during mid-October, 1974. All testing procedures followed were identical to those in North East District; the same form and test batteries were used. Similarly, all control pretests were machine scored in New York.

As tests were returned from scoring, they were forwarded to all schools with directions for interpretation included.

In order to standardize procedures for affective data collection, a meeting was held in March, 1975, where Assistant Principals and Principals from several North East schools involved in the study met to determine specific definitions of types of affective data to be examined ("suspension", "expulsions", "referral for discipline" and "drop-out").

Subsequently, an official was contacted in each school district in the study and was requested to forward the names of several employees who could responsibly collect the affective data.**

A meeting was held by the North East Special Education Director, attended by all individuals designated to collect affective data, at which (a) specific definitions were given for each type of data to be examined, and (b) data collection procedures were described.

**To maintain student privacy, it was decided that officials within each participant district would best determine who should examine records in that district.

Affective data was collected during April 1975. Designated individuals examined student records for the previous one hundred school days and recorded the following information for each student in the study: (a) number of days membership, (b) number of absences, (c) frequency of referrals for unacceptable behavior, (d) drop-out occurrences, (e) number of suspensions, and (f) if the child had been expelled. Totals were then computed for each experimental and control group.

Achievement posttesting for North East experimental students was accomplished during the week of March 17, and during April for all other schools. Procedures identical to those used in pretesting were followed. Form B was administered to all students. Tests were again machine scored by the publishers and results were forwarded to all schools.

AFFECTIVE DEFINITIONS

1. Referral:

a). Any time a student is referred to the office by school staff for disciplinary purposes

and/or

b). Any time a student is referred to the office for being involved in a non-classroom disturbance.

2. Suspension:

The student's family is officially notified that, for disciplinary reasons, the student is not permitted to attend class for a designated period of time.

3. Expulsion:

The student is removed from school by action of the School Board,

4. Drop-Out:

Anyone who has not yet graduated from high school, who has withdrawn from school during the school year, and whose records have not been forwarded to another school.

5. School Attendance:

The total number of days the student has been recorded as having attended school between _____ and _____.

C. DATA ANALYSIS:

In order to investigate degrees of difference between groups of students, in examination of the hypotheses, a series of analyses of variance (ANOVA) were performed.

(1) The first series of ANOVAs examined differences in academic achievement between

- (a) Sixth to eighth grade LLD and MBI students enrolled in the Learning Lab Project and matched students not enrolled in the project;
- (b) Sixth to eighth grade non-special education students enrolled in the Project and matched students not enrolled in the project;
- (c) A combined group of sixth to eighth grade LLD, MBI, and non-special education students enrolled in the Learning Lab Project and matched students not enrolled in the Project.

A separate analysis was computed for each group on Total Reading and Total Arithmetic scores on the Stanford Achievement Test, Primary III Battery, Forms A and B.

(2) Another series of ANOVAs examined differences in academic achievement between

- (a) Ninth to twelfth grade LLD and MBI students enrolled in the Learning Lab Project and matched students not enrolled in the Project;
- (b) Ninth to twelfth grade non-special education students enrolled in the Learning Lab Project and matched students not enrolled in the Project;

- (c) A combined group of ninth to twelfth grade LLD, MBI, and non-special education students enrolled in the Learning Lab Project and matched students not enrolled in the Project.

A separate analysis was computed for each group on both Total Reading and Total Arithmetic scores on the Stanford Achievement Test, Intermediate I Battery, Forms A and B.

- (3) A Third series of ANOVAs next examined differences in affective behaviors for each of the above described groups in (1) and (2). A separate analysis was conducted between experimental and control students on total numbers of (a) absences, (b) referrals, (c) suspensions, (d) drop-outs, and (e) expulsions.

V. ANALYSIS RESULTS

Following is a complete description of the results of the data analysis. Data pertinent to each hypothesis is examined separately in order to most accurately describe program effectiveness for each type of student (i.e., LLD, MBI, non-Special Education) as well as for combined groups of students. Results will be considered both in terms of (a) the existence of statistical significance, and (b) trends evident to the data. All conclusions to be drawn from analysis results will be included in Section VI of this research report.

H₁: At the end of one school year, sixth to eighth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will students not enrolled in a Learning Laboratory.

To test this hypothesis, a one-way analysis of variance (ANOVA) was performed between sixth to eighth grade LLD and MBI students in North East Learning Laboratories and matched students in control schools on separate measures of reading and arithmetic.

ANOVA SUMMARY TABLE I.
TOTAL READING CHANGE SCORES:
6TH TO 8TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	1800.89	1	1800.89	19.6336
Within Groups	31278.09	341	91.72	
Total	33078.97	342	342	

Experimental Group	N= 215	Mean= 6.7767
Control Group	N= 218	Mean= 2.0391

Probability of F is .00008***

*** Statistically significant beyond the .001 level.

As Table I indicates, sixth to eighth grade LLD and MBI students enrolled in North East's Learning Laboratories demonstrated highly significant reading change scores when compared with control students: while North East students experienced a mean gain of 6.8 raw score points, control students gained 2.0 points.

Therefore, the hypothesis that sixth to eighth grade LLD and MBI Learning Laboratory students will demonstrate greater positive reading change is accepted.

The analysis of the second aspect of H_1 , comparing degree of experimental and control student change in arithmetic achievement, appears in Summary Table II.

ANOVA SUMMARY TABLE II.
TOTAL ARITHMETIC CHANGE SCORES:
6TH TO 8TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	47.91	1	47.91	0.8711
Within Groups	18754.56	341	55.00	
Total	18802.48	342		

Experimental Group	N= 214	Mean= 5.1121
Control Group	N= 129	Mean= 5.8837

Probability of F is .65938

An examination of analysis results indicates that mean change scores, between experimental and control students are almost identical, and the probability of F is .65938.

Therefore, the data do not support the hypothesis that sixth to eighth grade LLD and MBI Learning Laboratory students will demonstrate greater positive arithmetic change.

H_2 : At the end of one school year, sixth to eighth grade non-special education students enrolled in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

The results of the one-way analysis of variance examining differences in experimental and control students' Reading scores appears in Table III.

ANOVA SUMMARY TABLE III
TOTAL READING CHANGE SCORES:
6TH TO 8TH GRADE NON-SPECIAL EDUCATION STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	14.22	1	14.22	0.0929
Within Groups	47872.92	313	152.95	
Total	47887.14	314		

Experimental Group	N= 95	Mean= 6.8947
Control Group	N= 220	Mean= 6.4318

Probability of F is .99940

As indicated in Table III above, the difference between experimental and control students' change scores is not statistically significant. The means are, in fact, almost identical, with the probability of F approaching 1.

Therefore, the first aspect of H_2 cannot be accepted: there is no statistical indication that sixth to eighth grade non-special education students enrolled in the Learning Laboratory demonstrate greater change in reading achievement than control students.

Results of the data analysis describing differences in arithmetic achievement between these two groups appear in Table IV.

ANOVA SUMMARY TABLE IV.
ARITHMETIC CHANGE SCORES:
6TH TO 8TH GRADE NON-SPECIAL EDUCATION STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	274.90	1	274.90	3.6877
Within Groups	23779.98	319	74.55	
Total	24054.88	320		

Experimental Group	N= 94	Mean= 2.7340
Control Group	N= 227	Mean= .7004

Probability of F is .05254

As indicated in Table IV, Learning Laboratory students tend to demonstrate greater change in Arithmetic scores than do control students. The probability of this degree of change being attributed to chance is only slightly greater than .05.

The second aspect of the H_2 , while not supported by statistical significance, is supported by a strong trend in favor of the Learning Laboratories for sixth to eighth grade non-special education students.

H_3 : At the end of one school year, a combined group of sixth to eighth grade LLD, MBI, and non-special education students enrolled in a Learning Laboratory will demonstrate greater positive change in total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

The summary table for the ANOVA performed on combined group Reading change scores of sixth to eighth grade students appears below.

ANOVA SUMMARY TABLE V.
READING CHANGE SCORES:
6TH TO 8TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	653.72	1	653.72	5.3130
Within Groups	80713.38	656	123.04	
Total	81367.09	657		

Experimental Group	N= 310	Mean= 6.8129
Control Group	N= 348	Mean= 4.8161

Probability of F= .02023 *

* Significant at .05 level

The above analysis indicates that the combined group of North East sixth to eighth grade Learning Laboratory students demonstrated a significantly greater positive change in total reading scores than did combined control students.

However, an examination of Tables I and III, reveals that the basis for this significance is attributable to the highly significant (beyond .001) change in North East special education students' reading scores, rather than to any measurable change in North East non-special education students' scores.

The initial aspect of H_3 is accepted: combined North East students do demonstrate significantly greater change scores. The reader is cautioned, however, to closely consider Tables I and III in order to more accurately note where this significance appears.

Similar results appear from the ANOVA of arithmetic scores of combined groups of sixth to eighth grade special education and non-special education students. These results appear in Table VI below.

ANOVA SUMMARY TABLE VI.
ARITHMETIC CHANGE SCORES;
6TH TO 8TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	539.62	1	539.62	7.9184
Within Groups	45113.82	662	68.15	
Total	45653.44	663		

Experimental Group	N= 308	Mean= 4.3864
Control Group	N= 356	Mean= 2.5787

Probability of F is .00526**

** Significant at .01 level

The combined group of North East students again demonstrates significant change scores when compared with control students. However, an examination of Summary Tables II and IV indicates that neither North East sixth to eighth grade special education nor non-special education students, when considered as separate groups, performed significantly better than control students. The significance found in the combined group analysis appears to be a statistical result of the large increase in the number of students over either separate group.

Therefore, the data supports the hypothesis that combined sixth to eighth grade experimental students will demonstrate greater change in arithmetic scores than will matched control students. However, a separate examination of special education and non-special education student results tends to reflect more accurately on actual student performance.

H_4 : At the end of one school year, ninth to twelfth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate greater positive change in total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

The results of the ANOVA examining differences in Reading gain between LLD and MBI students in the Learning Laboratories in North East Senior High Schools and control students are described in Summary Table VII.

ANOVA SUMMARY TABLE VII.
READING CHANGE SCORES:
9TH TO 12TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	341.89	1	341.89	2.2489
Within Groups	37398.33	246	152.03	
Total	37740.22	247		

Experimental Group	N= 171	Mean= 2.9532
Control Group	N= 77	Mean= .4156

Probability of F is .13096

Although North East students' mean gain was approximately 2.5 raw points higher than control students' gain, this difference is not statistically significant. However, data trends indicate that Learning Laboratory special education students do tend to demonstrate greater reading gain than do non-laboratory students.

ANOVA Summary Table VIII describes differences in Arithmetic change scores between LLD and MBI senior high experimental and control students.

ANOVA SUMMARY TABLE VIII.
ARITHMETIC CHANGE SCORES:
9TH TO 12TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	184.51	1	184.51	1.1833
Within Groups	36019.61	231	155.93	
Total	36204.12	232		

Experimental Group	N= 157	Mean= .0954
Control Group	N= 76	Mean=1.8026

Probability of F is .27733

Although not statistically significant, control students' mean gain was approximately 1.71 raw score points greater than experimental students' gain. This trend for senior high LLD and MBI control students to gain more than North East students fails to support the research hypothesis. However, the 1.71 raw score point difference may be accounted for by the Standard Error of Measurement of the Stanford Achievement Test. Therefore, no real conclusions as to the cause of the difference can be postulated.

H₅: At the end of one school year, ninth to twelfth grade non-special education students enrolled in a Learning Laboratory will demonstrate greater positive change in total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

The ANOVA results for differences in Reading change scores are reported in Summary Table IX.

ANOVA SUMMARY TABLE IX.
READING CHANGE SCORES:
9TH TO 12TH GRADE NON-SPECIAL EDUCATION STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	65.75	1	65.75	0.3857
Within Groups	83520.43	490	170.45	
Total	83586.17	491		

Experimental Group	N= 196	Mean= 2.5102
Control Group	N= 296	Mean= 1.7635

Probability of F is .57933

Although differences between Learning Laboratory students' and control students' performance are not statistically significant, North East non-special education students tended to achieve slightly higher change scores (.75 mean raw score points greater than control students).

This difference cannot be viewed as support for the research hypothesis, however, since the Standard Error of Measurement of the Stanford Achievement Test might account for any differences this small.

Analysis results for differences in senior high school non-special education student arithmetic scores appear in Table X.

ANOVA SUMMARY TABLE X.
ARITHMETIC CHANGE SCORES:
9TH TO 12TH GRADE NON-SPECIAL EDUCATION STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	25.36	1	25.36	0.2100
Within Groups	58817.56	487	120.78	
Total	58842.92	488		

Experimental Group	N= 193	Mean= .1657
Control Group	N= 296	Mean= .6317

Probability of F is .86398

Control students demonstrate a trend toward greater positive arithmetic change scores than North East students (a greater mean change of .466 raw score points). This trend indicates that the hypothesis postulating greater change in North East students must be rejected.

However, the mean difference in student arithmetic gain is small--possibly attributable to the Standard Error of Measurement, and the high probability of F (.86398) being attributable to chance preclude any conclusions regarding treatment effect.

H₆: At the end of one school year, a combined group of ninth to twelfth grade LLD, MBI, and non-special education students in a Learning Laboratory will demonstrate greater positive change in Total Reading and Arithmetic scores on the Stanford Achievement Test than will matched students not enrolled in a Learning Laboratory.

ANOVA results for reading change for senior high combined students is summarized in Table XI.

ANOVA SUMMARY TABLE XI.
READING CHANGE SCORES:
9TH TO 12TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	280.49	1	280.49	1.7100
Within Groups	121047.70	738	164.02	
Total	121328.19	739		

Experimental Group	N= 367	Mean= 2.7166
Control Group	N= 373	Mean= 1.4853

Probability of F is .18816

Although not statistically significant, data trends indicate that combined groups of students (LLD, MBI, and non-special education) enrolled in the Learning Laboratories tend to demonstrate greater reading change in raw score points than do control students.

Results from this analysis are a compilation of results from the separate analysis of special education student data, and non-special education student data, as explicated in Tables VII and IX.

ANOVA results examining differences in arithmetic achievement among combined groups of senior high students appear in Table XII.

ANOVA SUMMARY TABLE XII.
ARITHMETIC CHANGE SCORES:
9TH TO 12TH GRADE LLD, MBI, AND NON-SPECIAL EDUCATION STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.00	1	0.00	0.0000
Within Groups	95195.97	720	132.22	
Total	95195.97	721		

Experimental Group	N= 350	Mean= .1342
Control Group	N= 372	Mean= .1343

Probability of F is 1.00000

The data recorded in the above table indicates that there is no difference in arithmetic change scores between groups of students who participated in the Learning Laboratories and control students. H_6 , therefore, cannot be supported as it pertains to arithmetic achievement.

NOTE: For the purposes of cohesive explication of analysis results, Hypotheses 7, 8, and 9 will be discussed as a unit.

H_7 : At the end of one school year, sixth to eighth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, and (d) expulsions than will matched students not enrolled in a Learning Laboratory.

H_8 : At the end of one school year, sixth to eighth grade non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, and (d) expulsions than will matched students not

enrolled in a Learning Laboratory.

H₉: At the end of one school year, a combined group of sixth grade LLD, MBI, and non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, and (d) expulsions than will matched students not enrolled in a Learning Laboratory.

I. MIDDLE SCHOOL ABSENTEEISM

- a). Results from the on-way ANOVA performed on middle school special education absenteeism appear in Table XIII.

ANOVA SUMMARY TABLE XIII.
NUMBER OF ABSENCES AMONG
6TH TO 8TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	5.94	1	5.94	0.0715
Within Groups	35539.51	428	83.04	
Total	35545.45	429		

Experimental Group	N= 252	Mean= 6.5198
Control Group	N= 178	Mean= 6.7584

Probability of F is .99997

An examination of the above table indicates an almost identical mean absenteeism rate for Learning Laboratory and control students.

Therefore, Hypothesis 7 (a), indicating that North East LLD and MBI students demonstrate fewer absences than control students, is not supported.

- b). Table XIV indicates ANOVA results comparing absenteeism differences between experimental and control middle school non-special education students.

ANOVA SUMMARY TABLE XIV.
NUMBER OF ABSENCES AMONG
6TH TO 8TH GRADE NON-SPECIAL EDUCATION STUDENTS

SDURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	405.40	1	405.40	8.6422
Within Groups	18106.85	386	46.91	
Total	18512.25	387		

Experimental Group	N= 120	Mean= 6.7750
Control Group	N= 268	Mean= 4.5634

Probability of F is .00382 *

*Statistically significant at the .05 level.

The above results are statistically significant and indicate that North East Middle School non-special education students tend, on the average, to be absent from school 2.21 days (per 100 day period) more than do control students.

Hypothesis 8 (a), postulating that North East students would have fewer absences than control students, is not supported.

- c). Analysis results comparing absenteeism differences between combined groups of students (LLD, MBI, and Non-Special Education) appear in Table XV.

ANOVA SUMMARY TABLE XV.
NUMBER OF ABSENCES AMONG
6TH TO 8TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	274.19	1	274.19	4.1305
Within Groups	54166.98	816	66.38	
Total	54441.17	817		

Experimental Group	N= 372	Mean= 6.6022
Control Group	N= 446	Mean= 5.4395

Probability of F is .03983*

* Statistically significant at the .05 level

The above data considering differences in absenteeism between experimental and control combined groups of middle school students is statistically significant (.05 level): North East Learning Laboratory students average 1.17 absences per student more than control students in a 100 day period.

Hypothesis 9 (a) indicating that a combined group of LLD, MBI and non-special education students participating in the Learning Laboratories would have fewer absences, cannot be supported.

2. MIDDLE SCHOOL REFERRALS

- a). Results from the ANOVA comparing differences of numbers of referrals between experimental and control special education students appear in Table XVI.

ANOVA SUMMARY TABLE XVI.
NUMBER OF REFERRALS AMONG
6TH TO 8TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	11.75	1	11.75	1.6740
Within Groups	3009.99	429	7.02	
Total	3021.74	430		

Experimental Group	N= 253	Mean= 1.3557
Control Group	N= 178	Mean= 1.6910

Probability of F is .19332

Although not statistically significant, the above results indicate a trend for experimental students to have a lower number of school disciplinary referrals than control students: on the average, this difference is .335 fewer referrals per student during a 100 day period.

- b). Differences in numbers of referrals for middle school
~~non-special education students are described in ANOVA~~
Summary Table XVII.

ANOVA SUMMARY TABLE XVII.
NUMBER OF REFERRALS AMONG
6TH TO 8TH GRADE NON-SPECIAL EDUCATION STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	49.05	1	49.05	15.6879
Within Groups	1206.91	386	3.13	
Total	1255.96	387		

Experimental Group	N= 120	Mean= 1.5417
Control Group	N= 268	Mean= .7724

Probability of F is .00026***

*** Statistically significant at the .001 level

Experimental students averaged .7693 referrals per student more than did control students in a 100 day period. This difference is highly significant (.001 level) and is in conflict with the results postulated in Hypothesis 8(b).

The data, therefore, fails to support the research hypothesis.

c). The results of the ANOVA of differences in numbers of referrals between combined groups of middle school students are recorded in Table XVIII.

ANOVA SUMMARY TABLE XVIII.
NUMBER OF REFERRALS AMONG
6TH TO 8TH GRADE LLD, MBI AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	15.53	1	15.53	2.9444
Within Groups	4309.97	817	5.28	
Total	4325.50	818		

Experimental Group	N= 373	Mean= 1.4155
Control Group	N= 446	Mean= 1.1390

Probability of F is .08260

The above results indicate a strong trend for combined groups of students enrolled in the Learning Labs to experience more disciplinary referrals than control students. Hypothesis 9(b), therefore, is not statistically supported.

3. MIDDLE SCHOOL SUSPENSIONS

- a). Results from the ANOVA comparing differences of numbers of suspensions between experimental and control special education students appear in Table XIX.

ANOVA SUMMARY TABLE XIX
NUMBER OF SUSPENSIONS AMONG
6TH TO 8TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	2.65	1	2.65	5.3013
Within Groups	214.28	429	0.50	
Total	215.92	430		

Experimental Group N= 253 Mean= .0711

Control Group N= 178 Mean= .2303

Probability of F is .02052*

* Statistically significant at the .05 level

Control students averaged .1592 more suspensions per student during a 100 day period than did North East Learning Laboratory students. This difference is statistically significant (.05 level) and allows Hypothesis 7 (c) to be accepted.

b). ~~Table XX~~ Includes ANOVA data comparing number of suspensions between Middle school North East and control students.

ANOVA SUMMARY TABLE XX.
NUMBER OF SUSPENSIONS AMONG
6TH TO 8TH GRADE NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.00	1	0.00	0.0005
Within Groups	188.81	386	0.49	
Total	188.81	387		

Experimental Group	N= 120	Mean= .1250
Control Group	N= 268	Mean= .1269

Probability of F is 1.00000

Table XX indicates that there is no statistical difference between the number of suspensions of students in experimental versus control groups.

Therefore, the data fail to support Hypothesis 8(c), which postulated fewer suspensions for Learning Laboratory students.

c). An analysis of differences in the number of suspensions of combined groups of students (LLD, MBI, non-special education) in experimental versus control settings yielded the following data:

ANOVA SUMMARY TABLE XXI.
NUMBER OF SUSPENSIONS AMONG
6TH TO 8TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	1.29	1	1.29	2.6055
Within Groups	404.47	817	0.50	
Total	405.76	818		

Experimental Group	N= 373	Mean= .0885
Control Group	N= 446	Mean= .1682

Probability of F is .10274

Although not statistically significant, data trends indicate that, when considered as one group, Learning Laboratory students tend to average .0797 fewer suspensions per student in a 100 day period.

However, these trends in favor of North East students are largely a result of the lesser number of LLD and MBI referrals (see Table XIX).

4. MIDDLE SCHOOL EXPULSIONS

No expulsions of any experimental or control students occurred. Therefore, Hypotheses 7(d), 8(d), and 9(d), postulating fewer expulsions of Learning Laboratory than control students, are not supported.

NOTE: Similar to the discussion of Hypotheses 7, 8, and 9, subsequent Hypotheses 10, 11, and 12 will be considered as a unit in order to attain cohesiveness among data results.

H₁₀: At the end of one school year, ninth to twelfth grade LLD and MBI students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, (d) expulsions and (e) drop-out occasions than will matched students not enrolled in a Learning Laboratory.

H₁₁: At the end of one school year, ninth to twelfth grade non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, (d) expulsions, and (e) drop-out occasions than will matched students not enrolled in a Learning Laboratory.

H₁₂: At the end of one school year, a combined group of ninth to twelfth grade LLD, MBI, and non-special education students enrolled in a Learning Laboratory will demonstrate a smaller number of school (a) absences, (b) referrals, (c) suspensions, (d) expulsions, and (e) drop-out occasions than will matched students not enrolled in a Learning Laboratory.

1. HIGH SCHOOL ABSENTEEISM

- a). Table XXII includes results of the ANOVA determining differences between high school LLD and MBI experimental versus control students in rate of absenteeism.

ANOVA SUMMARY TABLE XXII.
NUMBER OF ABSENCES AMONG
9TH TO 12TH GRADE LLD AND FBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	107.56	1	107.56	1.0883
Within Groups	29845.41	302	98.83	
Total	29952.97	303		

Experimental Group	N= 208	Mean= 7.4808
Control Group	N= 96	Mean= 8.7604

Probability of F is .29797

Although not statistically significant, the above data indicate a trend for experimental high school special education students to be absent less frequently than matched control students. On the average, this difference was 1.28 days per student during a 100 day period.

- b). Results were noticeably different from comparisons of high school non-special education experimental and control students, as indicated in Table XXIII.

ANOVA SUMMARY TABLE XXIII.
NUMBER OF ABSENCES AMONG
9TH TO 12TH GRADE NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	3106.60	1	3106.60	24.5336
Within Groups	78761.40	622	126.63	
Total	81868.00	623		

Experimental Group N= 260 Mean= 10.1385

Control Group N= 364 Mean= 5.6126

Probability of F is .00002***

***Statistically significant at the .001 level

Non-special education Learning Laboratory students experienced almost twice as many absences during a 100 day period as did control students.

Hypotheses 11(a), postulating fewer experimental than control student absences, is therefore not supported.

c)...Table XXIV includes the results of the ANOVA comparing the rate of absenteeism of high school groups containing both special and non-special education students.

ANOVA SUMMARY TABLE XXIV.
NUMBER OF ABSENCES AMONG
9TH TO 12TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	1675.78	1	1675.78	14.0845
Within Groups	110175.72	926	118.98	
Total	111851.50	927		

Experimental Group N= 468 Mean= 8.9573

Control Group N= 460 Mean= 6.2696

Probability of F is .00042 ***

*** Statistically significant at the .001 level

The data indicate a highly significant difference in absenteeism rate between high school combined groups of LLD, MBI and non-special education students: Learning Laboratory students averaged 2.69 more absences per student in a 100 day period than did control students.

However, these results should be interpreted cautiously. This highly significant difference in total group attendance appears to be more a result of the large difference between non-special education student attendance in experimental and control settings.

However, Hypothesis 12(a), postulating fewer absences on the part of Learning Laboratory students, is not supported.

2. HIGH SCHOOL REFERRALS

- a). Differences in the number of referrals between high school special education students in experimental and control groups are listed in Table XXV.

ANOVA SUMMARY TABLE XXV.
NUMBER OF REFERRALS AMONG
9TH TO 12TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	176.54	1	176.54	37.7329
Within Groups	1412.96	302	4.68	
Total	1589.50	303		

Experimental Group	N= 208	Mean= .7356
Control Group	N= 96	Mean=2.3750

Probability of F is .00000 ***

*** Statistically significant at the .001 level

Differences between groups are highly significant. On the average, high school non-Laboratory special education students had 1.64 more referrals per student than did Learning Laboratory students.

Therefore, Hypothesis 10(b) is supported by the data.

- b). Table XXVI describes the results of the ANOVA comparing the numbers of referrals between high school non-special education students in experimental and control groups.

ANOVA SUMMARY TABLE XXVI.
NUMBER OF REFERRALS AMONG
9TH TO 12TH GRADE NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.22	1	0.22	0.0772
Within Groups	1807.46	622	2.91	
Total	1807.69	623		

Experimental Group	N= 260	Mean= .7885
Control Group	N= 364	Mean= .8269

Probability of F is .99993

In contrast with results from special education group comparisons, there is no statistical difference between non-special education experimental and control groups.

The data fails to support Hypothesis 11(b), which indicated that experimental students might be expected to have fewer referrals.

- c). Results from analyses considering combined group comparisons in number of referrals appear in Table XXVII.

ANOVA SUMMARY TABLE XXVII.
NUMBER OF REFERRALS AMONG
9TH TO 12TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	34.39	1	34.39	9.3594
Within Groups	3402.80	926	3.67	
Total	3437.19	927		

Experimental Group N= 468 Mean= .7650

Control Group N= 460 Mean=1.1500

Probability of F is .00268**

**Statistically significant at the .01 level

The differences in number of referrals between experimental and control combined groups of students (LLD, MBI, Non-Special Education) is significant at the .01 level. On the average, control students experienced .3850 more referrals per student than did experimental students.

However, the examination of students by special education and non-special education categories is more accurately indicative of student referral tendencies. As Table XXV indicates, there were many more referrals of special education control than experimental students; on the other hand, number of non-special education referrals were similar for both experimental and control students (see Table XXVI). Differences reflected in combined special education--non-special education data, therefore, reflect more the statistical impact of the strength of differences between special education groups.

3. HIGH SCHOOL SUSPENSIONS

- a). Table XXVII includes a description of differences in the number of suspensions between high school LLD and MBI students in experimental and control groups.

ANOVA SUMMARY TABLE XXVII
NUMBER OF SUSPENSIONS AMONG
9TH TO 12TH GRADE LLD AND MBI STUDENTS

SOURCES	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	25.66	1	25.66	27.3986
Within Groups	282.81	302	0.94	
Total	308.47	303		

Experimental Group	N= 208	Mean= .0625
Control Group	N= 96	Mean= .6875

Probability of F is .00001***

***Statistically significant at the .001 level

The ANOVA results yield strong support for Hypothesis 10(c). Each control student averaged .625 more suspensions than did each experimental student.

- b). Although not nearly so statistically strong, tendencies were similar for non-special education students, as indicated in Table XXVIII.

ANOVA SUMMARY TABLE XXVIII.
NUMBER OF SUSPENSIONS AMONG
9TH TO 12TH GRADE NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.29	1	0.29	0.6158
Within Groups	288.64	622	0.46	
Total	288.92	623		

Experimental Group	N= 260	Mean= .0885
Control Group	N= 364	Mean= .1319

Probability of F is .58415

Control students averaged .0434 more suspensions per student than did Learning Laboratory students.

- c). Table XXIX indicates differences in the number of suspensions between combined groups (LLD, MBI, non-special education) of high school experimental and control students.

ANOVA SUMMARY TABLE XXIX.
NUMBER OF SUSPENSIONS AMONG
9TH TO 12TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	6.78	1	6.78	10.5454
Within Groups	594.98	926	0.64	
Total	601.75	927		

Experimental Group	N= 468	Mean= .0769
Control Group	N= 460	Mean= .2478

Probability of F is .00161**

**Statistically significant at the .01 level

Experimental students experienced significantly fewer suspensions as a total group than did control students. It might be expected that the high statistical significance of differences among special education laboratory and non-laboratory students had a strong influence on the results of the combined group data. However, experimental groups did exhibit a trend across all students to experience fewer suspensions. Hypothesis 12(c) is therefore supported.

4. HIGH SCHOOL EXPULSIONS

Similar to middle school results, no expulsions of any experimental or control students occurred. Therefore, Hypotheses 10(d), 11(d), and 12(d), postulating fewer expulsions of Learning Laboratory than control students, are not supported.

5. HIGH SCHOOL DROP-OUT RATE

- a). Differences in the number of student drop-out occasions between high school special education students in experimental and control groups are described in Table XXX.

ANOVA SUMMARY TABLE XXX
NUMBER OF DROP-OUT OCCASIONS AMONG
9TH TO 12TH GRADE LLD AND MBI STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.02	1	0.02	0.9579
Within Groups	-5.86	302	0.02	
Total	5.88	303		

Experimental Group	N= 208	Mean= .0144
Control Group	N= 96	Mean= .0313

Probability of F is .67449

Experimental students experienced a slightly lower drop-out rate than did control students: control students averaged .0169 drop-out occasions more per student than did experimental students. Although indicative of a slight trend, these results cannot be viewed as statistically strong enough to support Hypothesis 10(d).

- b). Table XXXI includes a description of the drop-out rates of high school non-special education students in experimental and control groups.

ANOVA SUMMARY TABLE XXXI.
NUMBER OF DROP-OUT OCCASIONS AMONG
9TH TO 12TH GRADE NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.00	1	0.00	0.0941
Within Groups	19.36	622	0.03	
Total	19.36	623		

Experimental Group	N= 260	Mean= .0346
Control Group	N= 364	Mean= .0302

Probability of F is .99933

As is indicated, the mean number of drop-out occasions for students in both groups is almost identical.

Therefore, it cannot be concluded that non-special education students in the Learning Laboratories experience any fewer occasions of dropping out of school. Hypothesis 11(e) cannot be supported.

- c). A description of results of the ANOVA of data concerning combined groups of high school students (LLD, MBI, non-special education) appears in Table XXXII.

ANOVA SUMMARY TABLE XXXII.
NUMBER OF DROP-OUT OCCASIONS AMONG
9TH TO 12TH GRADE LLD, MBI, AND NON-SPECIAL ED. STUDENTS

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARE	F
Between Groups	0.01	1	0.01	0.1953
Within Groups	25.27	926	0.03	
Total	25.27	927		

Experimental Group	N= 468	Mean= .0256
Control Group	N= 460	Mean= .0304

Probability of F is .89296

The above data indicates very slight difference between combined groups of experimental and control students, too small a difference to indicate statistical trends.

Therefore, the data does not support Hypothesis 12(e), which postulated a smaller number of drop-out occasions by high school Learning Laboratory students.

VI. CONCLUSIONS

A. The hypothesis that sixth to eighth grade LLD and MBI students receiving services of a Learning Lab will demonstrate greater positive reading change over the control students not receiving Learning Lab services is supported. Middle school LLD and MBI students enrolled in the Learning Laboratories demonstrated a significant gain (.001) in reading achievement test scores over control students' scores.

The mean gain of 6.8 raw score points by North East students is too great to be absorbed by the standard error of measurement (SE_M). The results therefore indicate that the Learning Laboratories appear to exert a favorable influence on enrolled special education students in the middle school.

B. The hypothesis that LLD and MBI sixth to eighth grade students receiving Learning Lab services will perform better in math than the control students is not supported. Mean change scores between experimental and control students were identical indicating that treatment effects appear to be neither helpful nor deleterious to student arithmetic achievement.

When compared with the significant positive change scores in reading achievement by laboratory students, it appears that additional attention is required to improve the Learning Laboratory arithmetic program during the 1975-76 school year.

C. The hypothesis that sixth to eighth grade special education students enrolled in a Learning Lab will perform better in reading is rejected. The mean change scores in reading achievement were almost identical, indicating no effects attributable to the treatment.

It is interesting to note that while the middle school special education students show significant reading improvement, the non-special education students do not. This difference may be attributable to the following factors:

- 1). The selection process for regular education students may cause placement of students causing disciplinary problems in the Learning Laboratories. These students may not be gaining in reading achievement over non-Lab students because Lab teachers are not being adequately trained in behavioral management. Therefore, the source of some students' academic difficulties is not being altered and the Labs are not producing the anticipated effect.

- 2). A number of the non-special education students in the Learning Labs have been classified as "slow learners." Teachers in the middle school Learning Laboratories may not be individualizing instruction completely enough to meet the differing needs between LLD or MBI students versus slow learners.

For example, while LLD students often require emphasis on special skills such as auditory or visual perception, slow learners might require (a) a general remediation of all skills not previously attained and then (b) a program which provides for learning of a comprehensive array of reading skills in a step-by-step program including much practice and repetition.

Provision of more extensive inservice dealing with (a) behavioral management and (b) individualization of instruction (including methods of diagnosing and programming for students' strengths, weaknesses, and learning styles) is suggested to improve non-special education student gain scores.

D. The hypothesis that sixth to eighth grade non-special education students enrolled in a Learning Lab will do better in arithmetic is not supported by statistical significance but does indicate a strong trend in this direction. The Laboratory setting does appear to be exerting a favorable influence on gain in these non-special education students' arithmetic scores. However, the mean gain in raw score points by both experimental students (mean gain= 2.7 points) and control students (mean gain= .70 points) might be accounted for by the standard error of measurement in the Stanford Achievement Test. Therefore, definite conclusions cannot be formulated regarding the impact of the Learning Laboratory on sixth to eighth grade non-special education students.

The recommendations offered in conclusion C above also appear operative here. More significant growth might occur in non-special education students' achievement if Learning Laboratory teachers were better trained in behavioral management and individualization of instruction.

E. Although LLD and MBI ninth to twelfth grade Learning Laboratory students did not demonstrate significantly greater positive change in reading scores when compared with control students, data tends to indicate that Lab students experienced more positive growth.

The more extensive growth by middle school than high school special education students enrolled in reading in the Learning Laboratories may be attributed to the following factors:

- 1). High school students have experienced several more years of failure to learn reading skills than have middle school students. Perceptual or memory difficulties which have not been previously remediated are apt to be more in-

grained in these older students than in younger ones. In order to attain the same marked degree of positive change in high school students that occurs in middle school students, more time for academic remediation in the Learning Laboratory may be necessary. It may not be realistic to expect seven months of instruction to overcome years of accumulated difficulties in reading by special education students.

2). Older students, having experienced such long-term failure in developing reading skills, may also have more highly developed negative emotional responses to the reading process than middle school students. Such increased negative affect may result in slower gain in reading skills.

If teachers were more adequately trained in behavioral management and interpersonal skills, possible learning difficulties attributable to the reading process might be alleviated.

It is a tribute to the success of the Learning Laboratory reading program that enrolled high school students have demonstrated greater reading gain than control students who have previously experienced similarly intense academic failure.

F. The hypothesis that ninth to twelfth grade LLD and MBI Learning Laboratory students would perform better than control students in arithmetic is not supported. These techniques used by Laboratory teachers in improving high school students' reading skills have either not been similarly applied to arithmetic skills or have not met with similar success.

Data results indicate that more training of North East teachers in arithmetic programming appears necessary for Learning Laboratory success at both the middle school and high school levels.

G. The hypotheses that ninth to twelfth grade non-special education students enrolled in a Learning Lab perform better in reading and arithmetic are not supported. North East students did demonstrate a larger gain in raw score points in reading achievement than did control students, although this gain was not statistically significant and might be attributable to the standard error of measurement.

On arithmetic achievement measures, control students demonstrated more gain than experimental students, although differences were small.

As discussed in conclusion C above, these results indicate the need for additional Lab teacher training in improved methodology for teaching basic skills, as well as in behavioral management where placement procedures have caused students with disciplinary problems to be placed in the Lab.

An additional factor which may be influencing achievement levels of high school non-special education Lab students is the attachment of a stigma to participation in the Learning Laboratory. Whereas the control student is also a slow learner or student in academic difficulty, he does remain in the classroom with peers who are not similarly classified as slow-learners. However, the non-special education Lab student finds himself placed in a classroom with students who are sometimes noticeably learning disabled and/or brain injured. He may thereby be viewing himself in part as similar to these students and such stigma may be influencing his performance. North East Lab teachers had initially acknowledged the possibility of such self-

classification by enrolled non-special education students and have attempted to prevent it by centrally locating the Labs in the building and by involving regular classroom teachers. It appears that more extensive mainstreaming of Learning Laboratory classes may be necessary, perhaps involving measures such as scheduling average and above-average learners into the Laboratory for more intensive subject-area involvement.

H. Any analysis of academic performance of combined groups of special and non-special education students should not be considered indicative of growth or lack thereof on the part of all students enrolled in the Lab. For example, the strength of reading gain indicated for combined groups of students (special and non-special education) in the middle schools is a result of the statistical influence of the significant gain of special education students (.001) on the non-significant gain of regular education students.

Student results should therefore be considered, at very least, by special or non-special education category, and, at very best, by individual student gain or loss.

Future consideration of the efficacy of the Labs might compare current academic and affective performance of each student with his own past performance. Resultant information would make Laboratory teachers more knowledgeable of student needs.

I. The hypotheses purporting that a lower rate of absenteeism would occur among all students enrolled in Learning Labs at both the middle school and high school levels are largely unsupported.

1). Data from the middle schools indicate that LLD and MBI students were absent on almost equal number of occasions in experimental as in control situations.

Non-special education middle school students participating in the Labs were absent on significantly more (.01) occasions than non-special education control students.

2). Data from the high schools indicate that while LLD and MBI North East students had a lower absenteeism rate, the difference does not approach statistical significance.

High school non-special education students in the experimental group were absent almost twice as frequently as matched control students, statistically significant at the .001 level.

It appears, therefore, that attendance rates of special education Lab students at both the middle school and high school levels are approximately the same as attendance rates of special education students in control schools.

However, non-special education students in the Labs were absent significantly more times than control students at both the middle and high school levels. Reasons may include:

- (1) Special education students in the Labs are receiving no incentive to attend school beyond that received by non-Laboratory students.
- (2) Non-special education students in the Labs are perceiving the school situation more negatively than their non-Lab counterparts.

The attempt to provide academic and affective situation which would draw participating students to school, therefore, is not producing the desired effects. Special education Lab students may be viewing the Learning Labs as merely another special education situation; non-special education Lab students, may be reacting negatively to being assigned to classes with special education students—if such assignment causes either a change in their self-perception or evokes overt negative response from peers, their increased absenteeism rate may be explained.

More in-depth effort appears necessary to produce an environment which would cause students to turn to the Learning Laboratory as a place where academic and personal difficulties can be ameliorated.

J. Hypotheses anticipating a lower disciplinary referral rate for Learning Laboratory students were supported for special education students, but were not supported for non-special education students:

- (1) While not statistically significant, North East middle school special education students averaged .34 fewer referrals than control students. High school special education experimental students were referred an average of 1.64 fewer times than control students (statistically significant beyond the .001 level).
- (2) On the other hand, experimental non-special education students were referred significantly more frequently (.001) at the middle school level and approximately the same number of times as control students at the high school level.

The disparity between reactions of special education versus non-special education Laboratory students to their school situation is even more marked by number of disciplinary referrals than by absenteeism rate. The strongly negative response by Laboratory non-special education students indicates a need for North East officials to explore more deeply ways of further directing the Learning Laboratories into the academic mainstream of the schools so that participation by students results in positive, rather than negative, affect.

K. Hypotheses anticipating a lower suspension rate for Learning Laboratory students were largely supported.

- (1) At both the middle school and high school levels, special education students enrolled in the Learning Labs had significantly fewer numbers of suspensions than did control students.
- (2) Numbers of suspensions of non-special education students at the middle schools were equivalent for experimental and control students.
- (3) Although not statistically significant, Learning Laboratory non-special education students at the high schools averaged .434 fewer suspensions than control students.

Therefore, it appears that with the exception of middle school non-special education students, Lab students are demonstrating a lesser number of extreme disciplinary occurrences, resulting in fewer suspensions.

L. Across schools, student expulsion appears to be extremely minimal. Since no expulsions occurred of any students participating in the research study, hypotheses anticipating fewer Laboratory student expulsions cannot

be supported.

M. Data results failed to support the hypotheses that high school special and non-special education students enrolled in the Labs would experience a lower number of drop-out occasions:

- (1) While experimental students experienced a slightly lower drop-out rate than control students, this difference is not statistically significant.
- (2) The mean drop-out rate was equivalent for non-special education students in experimental and control situations.

The conclusion must be drawn, therefore, that the Learning Laboratories are not influencing students to remain in school. Although it does not appear realistic to assume that a student enrolled in a Laboratory for approximately one hour per day would overcome strong aversion to the overall school situation, it does seem that an extension of the Lab situation might include, for example, more intensive counseling and vocational experiences for potential drop-outs. Such provisions should be considered for inclusion in future Learning Laboratories.

APPENDIX III

THE STUDENT RESOURCE PROGRAM

AT

EISENHOWER MIDDLE SCHOOL

Weldon Whisenant
Tony Petri
James Roach
Maureen Hart
Carol Gassiot
Helen Anderson
Jill Baucum
Marion Bird
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Camille Boyd
Charlotte Cabaniss
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GENERAL PHILOSOPHY

There are several tenets that the Student Resource teachers at Eisenhower have unanimously agreed upon. We believe these to be the philosophy that is evident in our teaching. The following statements express our philosophy:

1. Every student has a right to public education.
2. It is our responsibility to use multiple means to adapt that education to meet individual needs, both cognitive and affective.
3. The teacher should realize that the student has a responsibility in his own education.
4. We believe there should be a mutual bond of respect within the classroom unit.
5. The Student Resource team must function as a cohesive unit on all levels from the classroom to the district office.

GENERAL OBJECTIVES

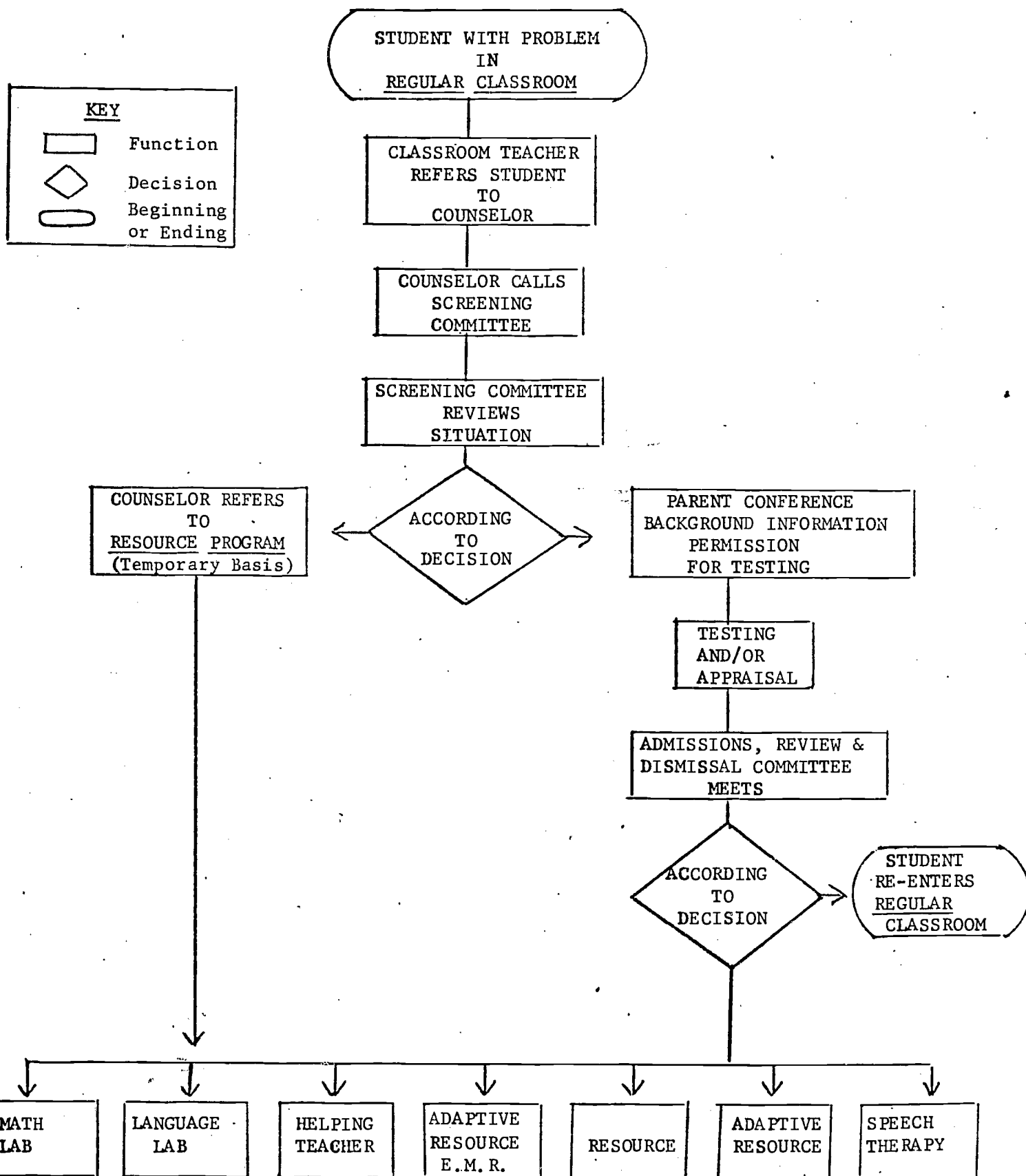
- A. Accountability to the student
 - 1. by determining potential
 - 2. by using necessary means to meet potential
 - 3. by seeking self-realization
- B. Accountability to the administration
 - 1. by program development
 - 2. by program management
 - 3. by program evaluation
- C. Accountability to parents
 - 1. by giving information
 - 2. by interpreting needs
 - 3. by evaluating students' progress

SPECIFIC PROGRAMS

Introduction

In the following sections, individual descriptions of the various areas of Eisenhower's Student Resources programs are listed. Among these are objectives, materials and methods, number of students receiving services, further recommendations, flow charts of the delivery model, and floor plans. It should be noted that the lists of materials and methods are not necessarily recommendations. It is suggested that persons might review the materials and decide what is appropriate for their situations. In fact, the above suggestion is made concerning all areas listed.

METHODS BY WHICH STUDENTS MAY ENTER RESOURCE PROGRAMS



NUMBER OF STUDENTS RECEIVING SERVICES
OF STUDENT RESOURCES AND C.T.U. SUPPORT CLASSES

	<u>ONE ROTATION</u>	<u>WEEKLY</u>
Speech Therapy (Cabaniss)		Approx. 75
Listening Lab Drop-in	10	50
EMR (Shapiro)	8	40
Resource (Bird)	47	188
Resource Drop-in		5
Adaptive Resource (Ibanez)	25	100
Adaptive Resource Drop-in		8
Helping Teacher (Hannaman)	10	40
Helping Teacher Drop-in or Crisis		20
Vocational Orientation (Call)	38	152
Language Lab (Boyd)	52	212
Math Lab (Baucum)	48	192
Math Lab Drop-in		25

CLASSROOM TEACHER UNITS SUPPORTING STUDENT RESOURCES PROGRAMS

7th & 8th Language Lab - Remediation (Jessic)	57	228
6th Language Lab - Remediation (Gillispie)	39	156
7th & 8th Math Lab - Remediation (Gilger)	63	252
Walk-in		3
6th Math Lab - Remediation (Forster)	38	152
Walk-in		6
6th & 7th Corrective Reading (Klopfenstein)	90	360
7th Corrective Reading (Snider)	28	112
6th Slower-paced Reading - Grade Level (Meads)	40	160

Language Lab

1. Objectives:

- a. To provide the underachiever with a curriculum modified to fit his individual needs.
- b. To attempt to remediate the underachiever in order that he can return to the mainstream.
- c. To utilize classroom management techniques in an effort to encourage the unmotivated student.
- d. To assure a measure of success to every student.

2. Materials and Methods:

- a. Fries spelling patterns used in teacher-made handouts.
- b. Simultaneous-writing-and-talking used with commonly misspelled words.
- c. "The Action Kit" and the "Sprint Library" (Scholastic Book Services) used for language skills.
- d. "The Writing Bug" (Random House) and various pictures used for composition.
- e. Various Continental Press publications used for vocabulary, phonics and usage drills.
- f. Individual weekly contacts with the reward being free time used for motivation.

3. Number of Students Receiving Service:

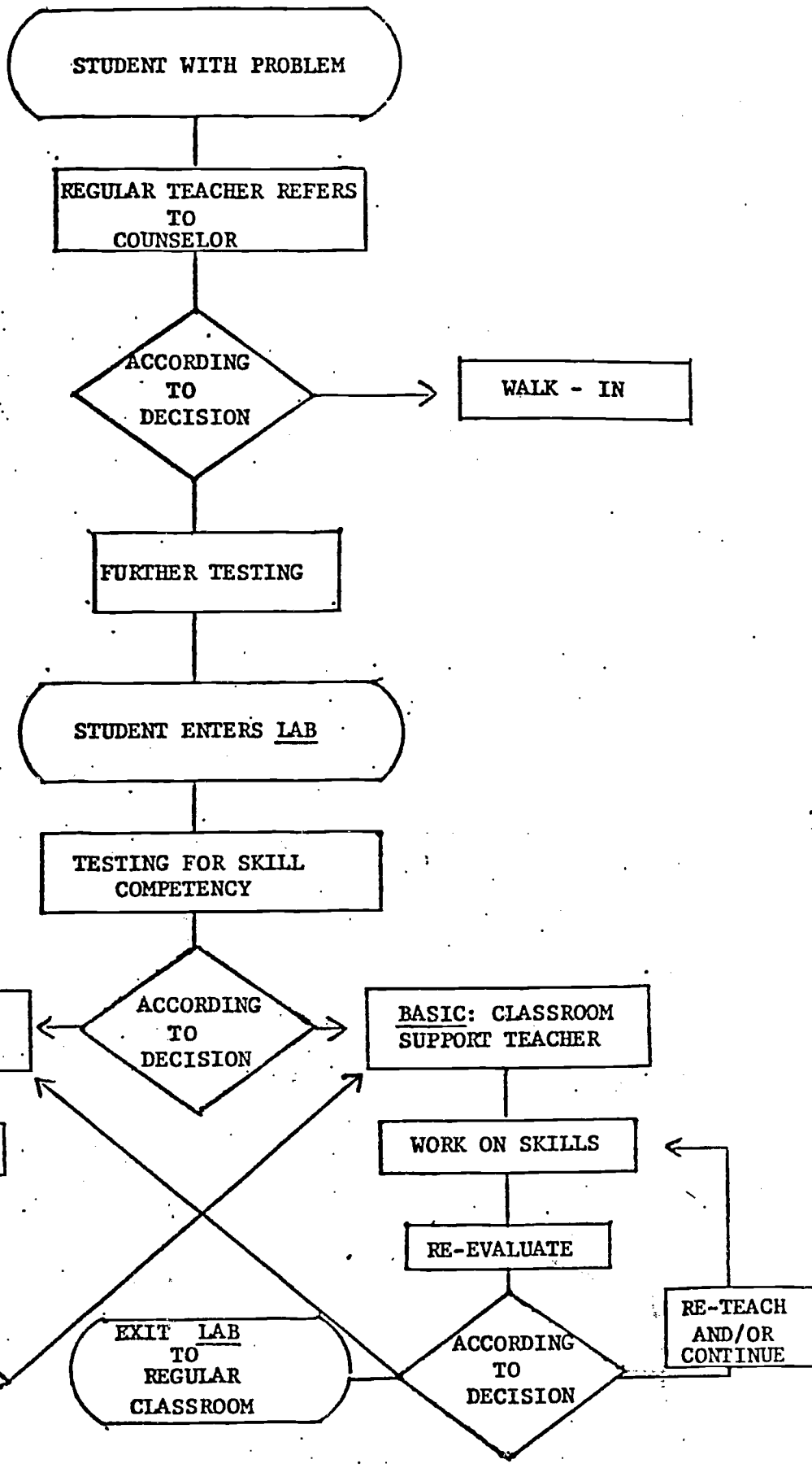
The Language Lab services approximately 150 students. The Special Education teacher has 8 - 10 students per period while the regular classroom teacher support unit has 11 - 17 students per period. Of these students approximately 60% are identified as L/LD.

4. Further Recommendations:

- a. Each student should have his own "words learned to spell" file.
- b. Simultaneous - writing - and - talking should be used more often.
- c. There is a definite need for more space:
 - more effective group work
 - less distraction
 - less distraction
- d. There is also a definite need for a more permanent room divider in the present space set-up.
- e. The Support Classroom Teachers should coordinate her program with that of the regular teachers modifying the regular curriculum only when necessary.

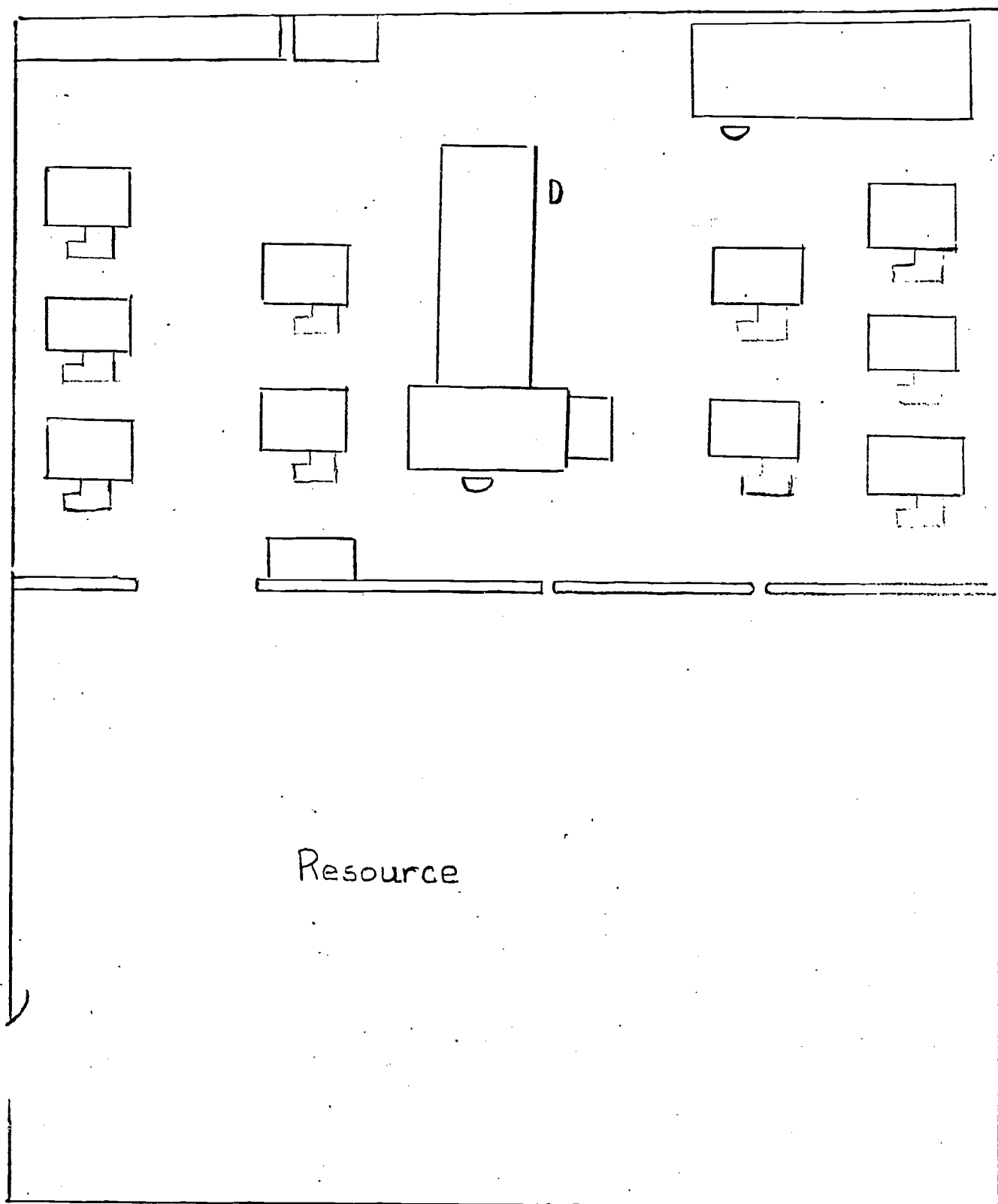
5. The Lab Concept:

A regular classroom teacher works as a support unit to the special education teacher. In this way remedial techniques and special programs are available to the non-qualified student. The regular teacher carries all the students on his role. These students are exchanged as needed at six week intervals. (See Flow Chart)

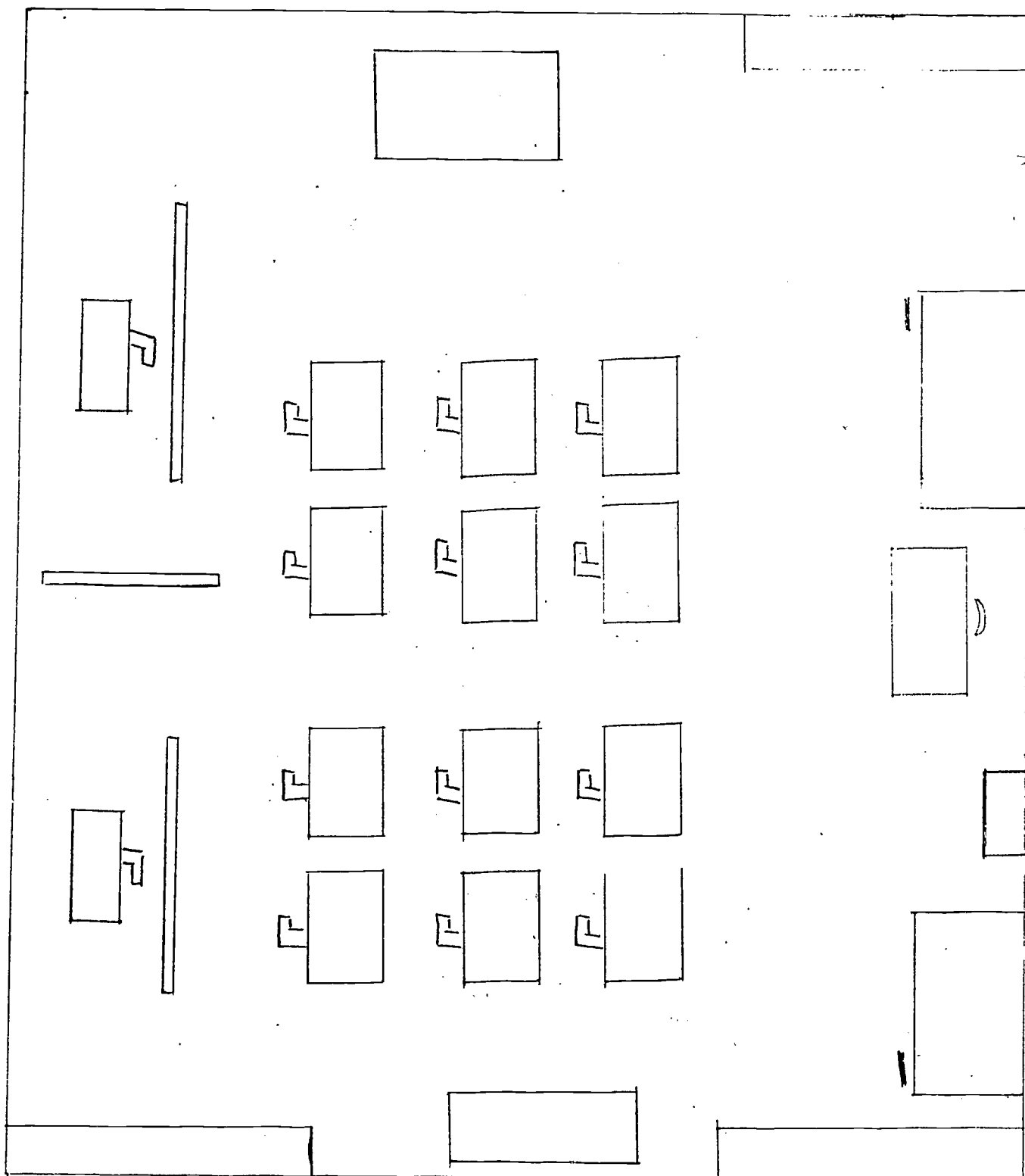


Room 215

Present Floor Plan - Language Lab



Recommended Floor Plan



20
1/2/20/20

112

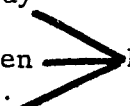
Math Lab

1. Objectives:

- a. Provide the underachiever with a curriculum modified to fit his individual needs.
- b. Attempt to remediate the underachiever in order that he can return to the mainstream.
- c. To utilize classroom management techniques in an effort to encourage the unmotivated students.
- d. Assure a measure of success to every student.

2. Materials and Methods:

a. Materials:

- 1) elementary math textbooks for all grade levels
- 2) Aftermath 1A & 1B
- 3) crossnumber puzzles
- 4) modern math ditto books (8)
- 5) four boxes of add/sub/mult/div/ flashcards
- 6) Math Laboratory Kit 1 & 2
- 7) Arithmetic Step by Step
- 8) Continuous Progress - 600
- 9) The Learning Skills Series: Arithmetic
- 10) Freeway
- 11) Kitchen  Math
- 12) Auto
- 13) five Sears catalogues
- 14) Games: Fractions are easy as pie, Quizmo, Toy Money 7501, Heads Up, Go to the head of the class, Game of the States, Introductory Chess, Your America, Barrel of Monkeys, Georgins.

b. Methods:

- 1) filmstrips
- 2) movies
- 3) notebooks with math papers are kept by each student--they are graded at least once a six weeks
- 4) individual weekly assignment sheets with the reward being free time used for motivation.

3. Number of Students Receiving Service:

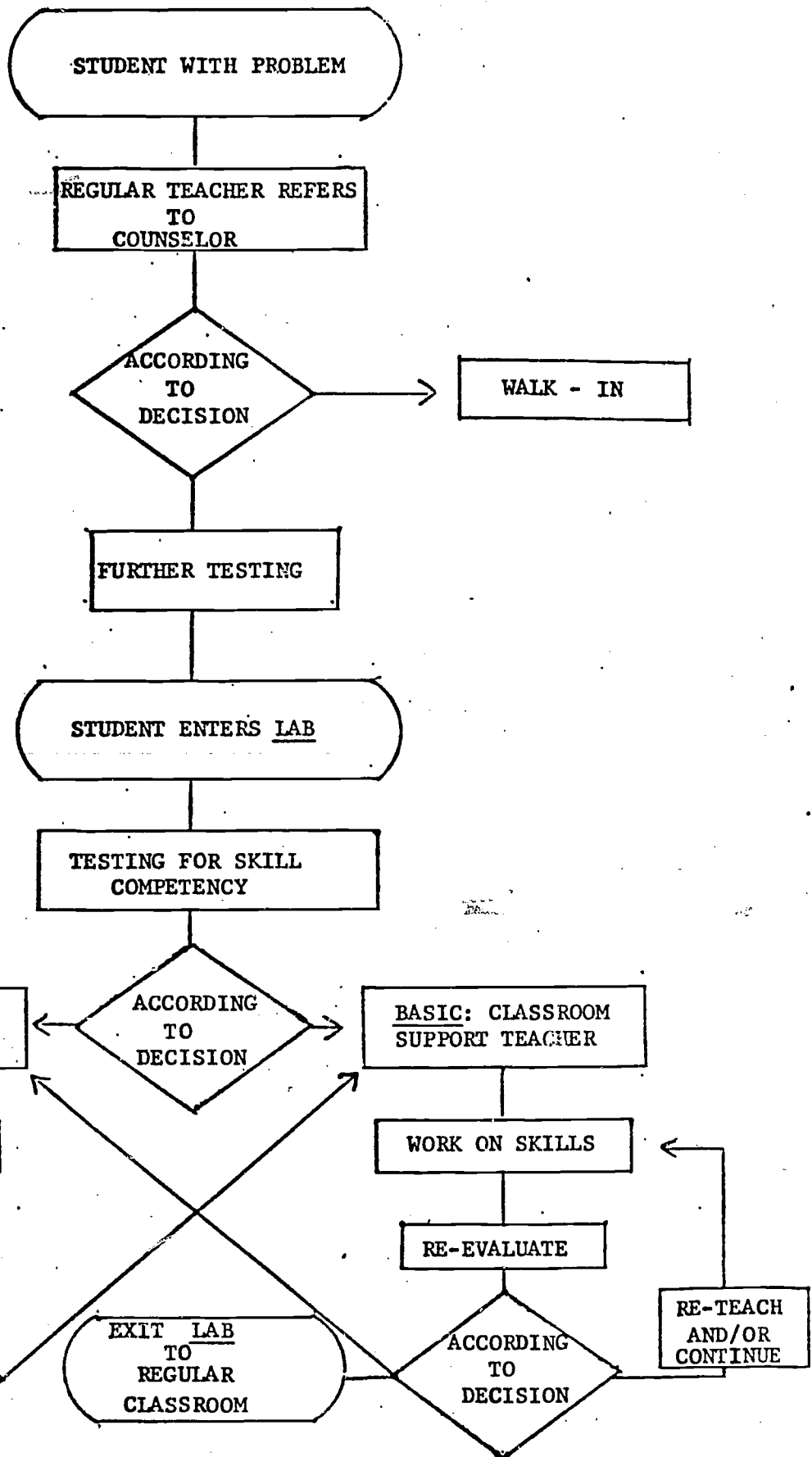
The Math Lab services approximately 160 students. The special education teacher has 8 - 10 students per period, while the regular classroom teacher support unit has 11 - 12 students per period. Of these students, approximately 60% are identified as L/LD.

4. Further Recommendations:

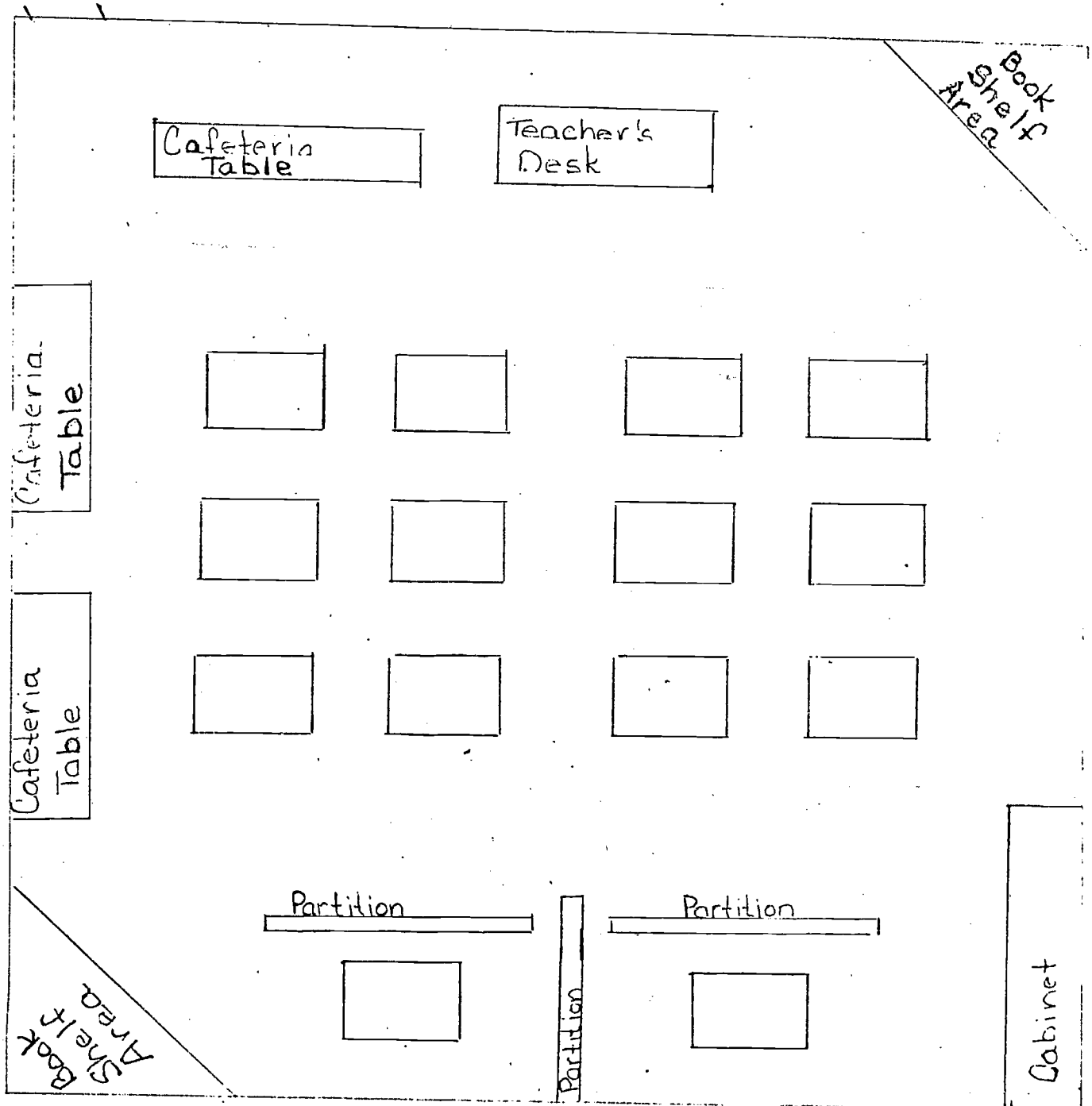
- a. The support classroom teacher should coordinate her program with that of the regular curriculum only when necessary.
- b. Separate rooms for the support unit and the Lab are recommended because of the different teaching techniques utilized in the programs.

5. The Lab Concept:

A regular classroom teacher works as a support unit to the special education teacher. In this way remedial techniques and special programs are available to the non-qualified student. The regular teacher carries all the students on his roll. These students are exchanged as needed at six-week intervals. (See Flow Chart)



Recommended Floor Plan



Resource

1. Objectives:

- a. To work closely with the regular classroom teachers to locate the specific problem each student has.
- b. To tutor student in mainstream classes.
- c. To attempt to remediate the underachiever in order that he can return to the mainstream.
- d. To make the L/LD students aware of their abilities (strengths, good points)

2. Methods:

- a. Collect weekly assignment sheets from the mainstream teachers who work with L/LD students.
- b. Work 1 to 1 when tutoring.
- c. Conduct small oral reading groups when possible.
- d. Provide free time as motivation for productive use of time.
- e. Use Listening Lab tapes for slow readers.

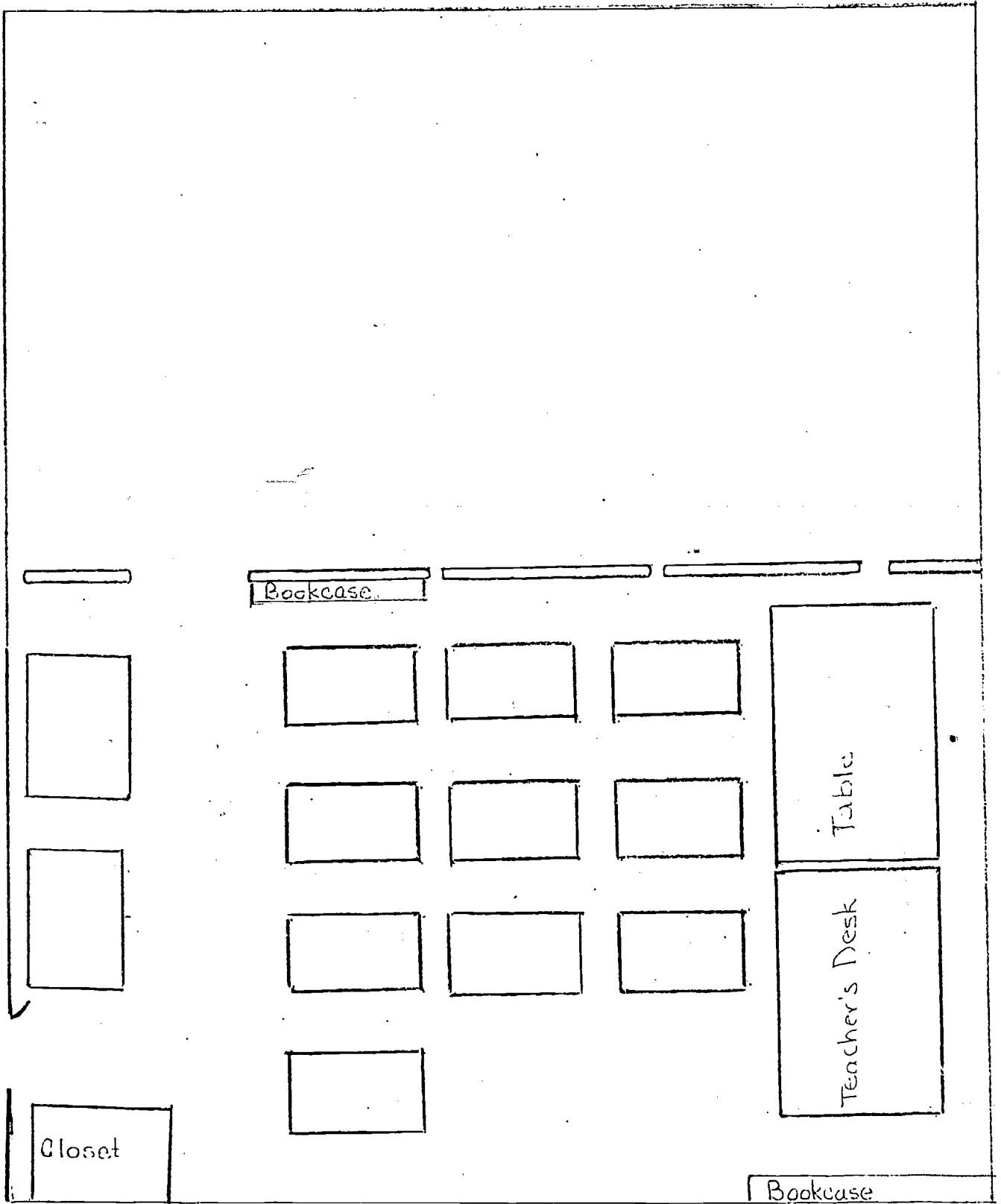
3. Number of Students Receiving Service:

Forty students are served by this program.

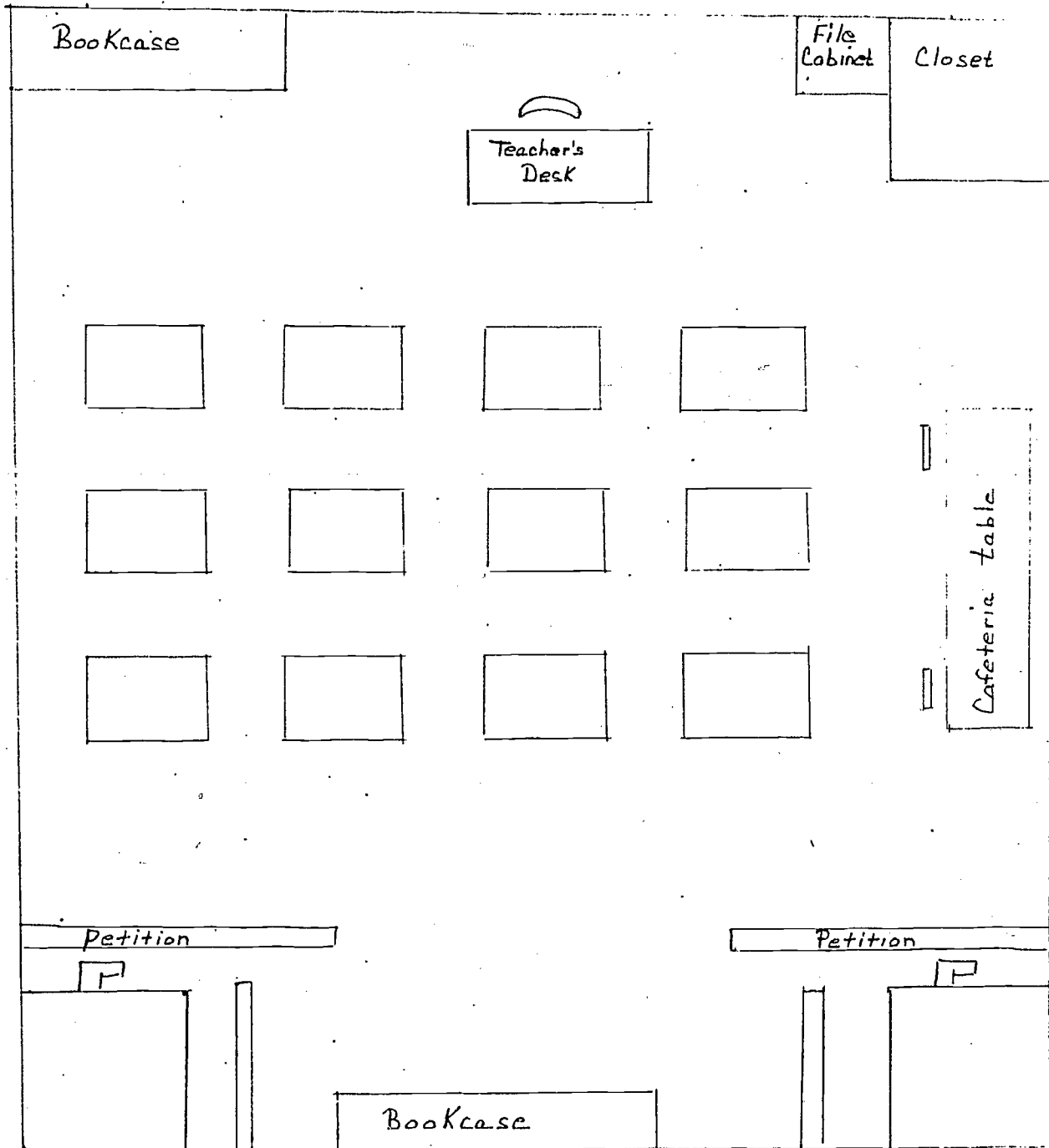
4. Further Recommendations:

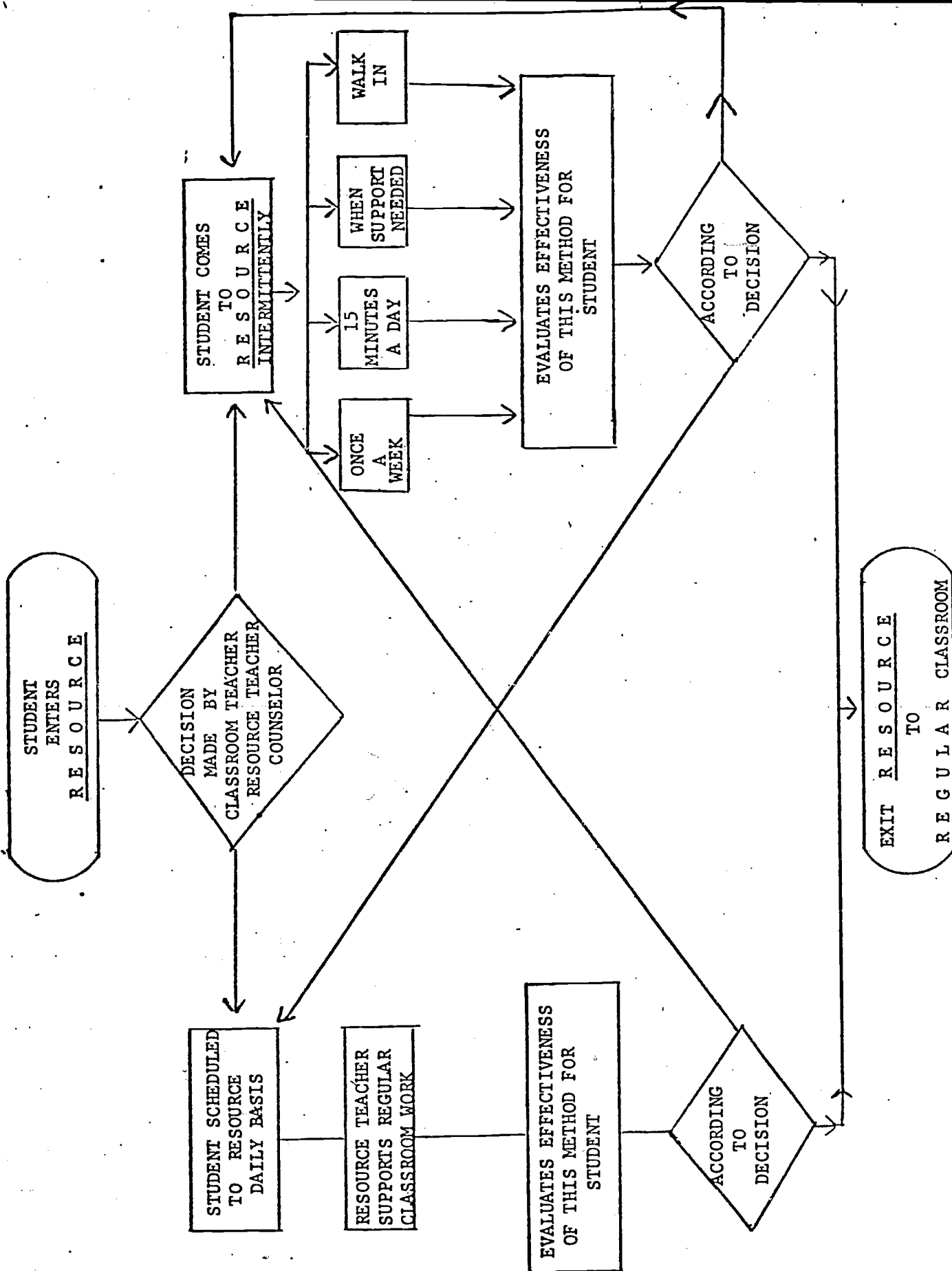
- a. There is a need for more space in order to provide a more structured, less distracting atmosphere for the students.
- b. Only 10% of the Resource students require an hour of Resource a day. The remainder should be placed in a mainstream class with the student coming out of his classes when he needs support.

Floor Plan - Present



Floor Plan - Recommended





Speech Therapy and Listening Center Program

1. Objectives:

a. establish a speech therapy case load

1) find students

a) screening

(1) all sixth grade students

(2) seventh and eighth grade students new to the school

b) referrals

(1) counselors

(2) teachers

(3) parents

(4) elementary schools N.E.I.S.D. - end of year referral lists

(5) previously attended schools - other districts

2) areas of work

a) speech therapy

(1) articulation

(2) hearing

(3) stuttering

(4) voice

(5) reverse swallow

b) oral and written language

(1) grammatical structure

(2) auditory and visual retention

(3) phonics

(4) foreign dialect

(5) handwriting

b. establish a listening center program

1) students qualify if they have

a) short attention span

- b) low reading level
- c) excessive absences
- d) desire from within themselves
- 2) students are recruited
 - a) by teacher referral
 - b) by counselor referral
 - c) by parent referral
 - d) at their own request
 - e) by review of records and grades
- c. serve in a supportive role for classroom subject matter
 - 1) subjects involved
 - a) science
 - b) history
 - c) electives
 - 2) emphasize how to study skills
- d. remediate handwriting skills
 - 1) emphasis only on legibility
 - 2) available to students
 - a) who are recommended
 - b) who show an interest
- 2. Materials and Methods:
 - a. materials
 - 1) Specific Skills Series - Complete Specimen Set - Boning - Barnell Loft. LTD. Pub.
 - 2) Scholastic's - Scope Visulas Series books 1 - 16
ditto masters, transparencies
 - 3) Developing Auditory Awareness and Insight (Herr)
 - a) Perceptual Communication Skills (Workbook softbound) Herr
 - b) Developing Auditory Awareness and Insight (Workbook softbound) Herr

- c) Developing Auditory Awareness and Insight (Workbook softbound) Herr (2)
- d) " " " " " " " " (3)
- 4) The Coping With Series - American Guidance Service Inc.
(Schwarzrock & Wrenn) - 23 books (softbound) - Teacher's Manual (Softbound)
- 5) Xerox Publications - 15 large newprint magazines - Map Skills A-E
Table and Graph Skills A-D - Reading Success Series 1-6
4 small newprint magazines - Teacher's Guide Table and Graph
Skills Veries 3,4,5,6 - Reading Success Series
Drugs in Our World books 1 and 2
- 6) Letters and Sounds (softbound) Scott Foresman
- 7) A Mini Course in Phonics for Intermediate Grades - Scott Foresman
- 8) Books and Workbooks (elementary reading)
 - a) Tiger's, Lions, and Dinosaurs
 - b) Rainbows
 - c) Signposts
- 9) Tongue Thrust and Speech Correction (softbound) Larr
- 10) The Charlie Brown Dictionary - C.M. Schulz - World Publishing - 6 vol.
- 11) Richard Scarry's Best Word Book Ever - Golden Press Pub.
- 12) Better Speech and Better Reading - Schoolfield - Expression Co.
- 13) Voice and Articulation Drillbook - Fairbandk - Harper & Bros. Pub.
- 14) Basic Set of Word Making Cards - Word Making Prod. Inc. Pub.
- 15) Games
 - a) Spill & Spell (Parker
 - b) Rack-O (Milton Bradley)
 - c) Know Your America (Cadaco)
 - d) Sentence Builders (Cadaco)
 - e) Perfection
 - f) Giant Tic-Tac-Toe (Hasbro)
 - g) Scrabble

h) Scrabble Sentence Cube Game

i) Checkers (Hasbro)

16) Handbook in Diagnostic Teaching - Mann & Suiter - Allyn & Bacon Pub.

b. Methods

1) Fries Frames

2) Fitzgerald Key

3) Garlinger therapy for Tongue Thrust

3. Number of Students Receiving Service

a. speech therapy

1) minimum of 25 students

2) maximum of 75 students

a) includes severe problems seen up to five times a week

b. listening center

1) maximum of 22 students can listen per period

a) 6 at carrels

b) 8 each at two listening center tables

2) maximum of 132 students can listen per day

3) maximum of 660 students can listen per week

4) number of drop-in students which can be helped is dependent upon student and task.

4. Further Recommendations:

a. all students who are making F grades should be reached in some way

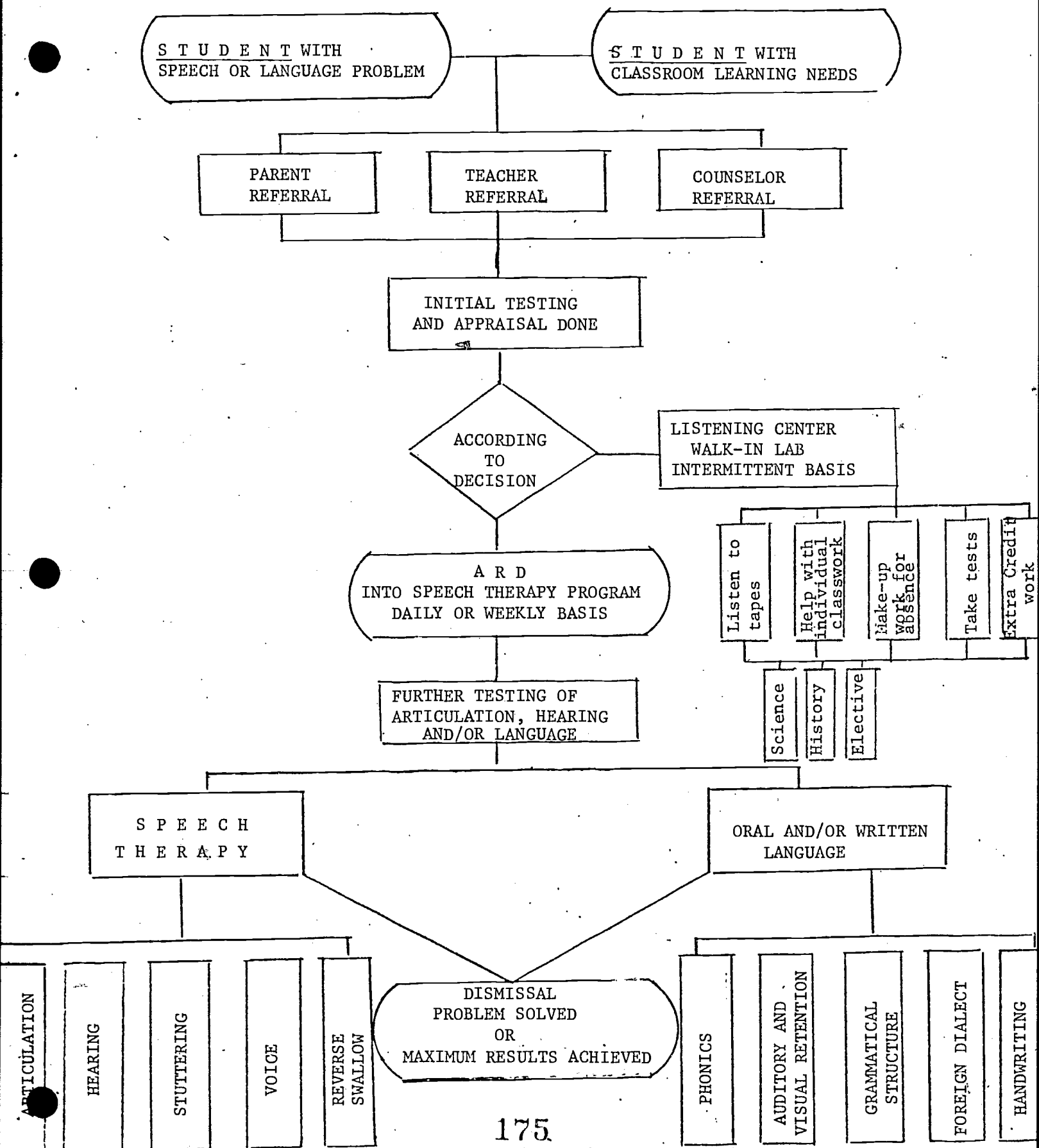
b. some of our tapes should be redone and some should be duplicated

c. a phonics program should be available for those reading teachers requesting it

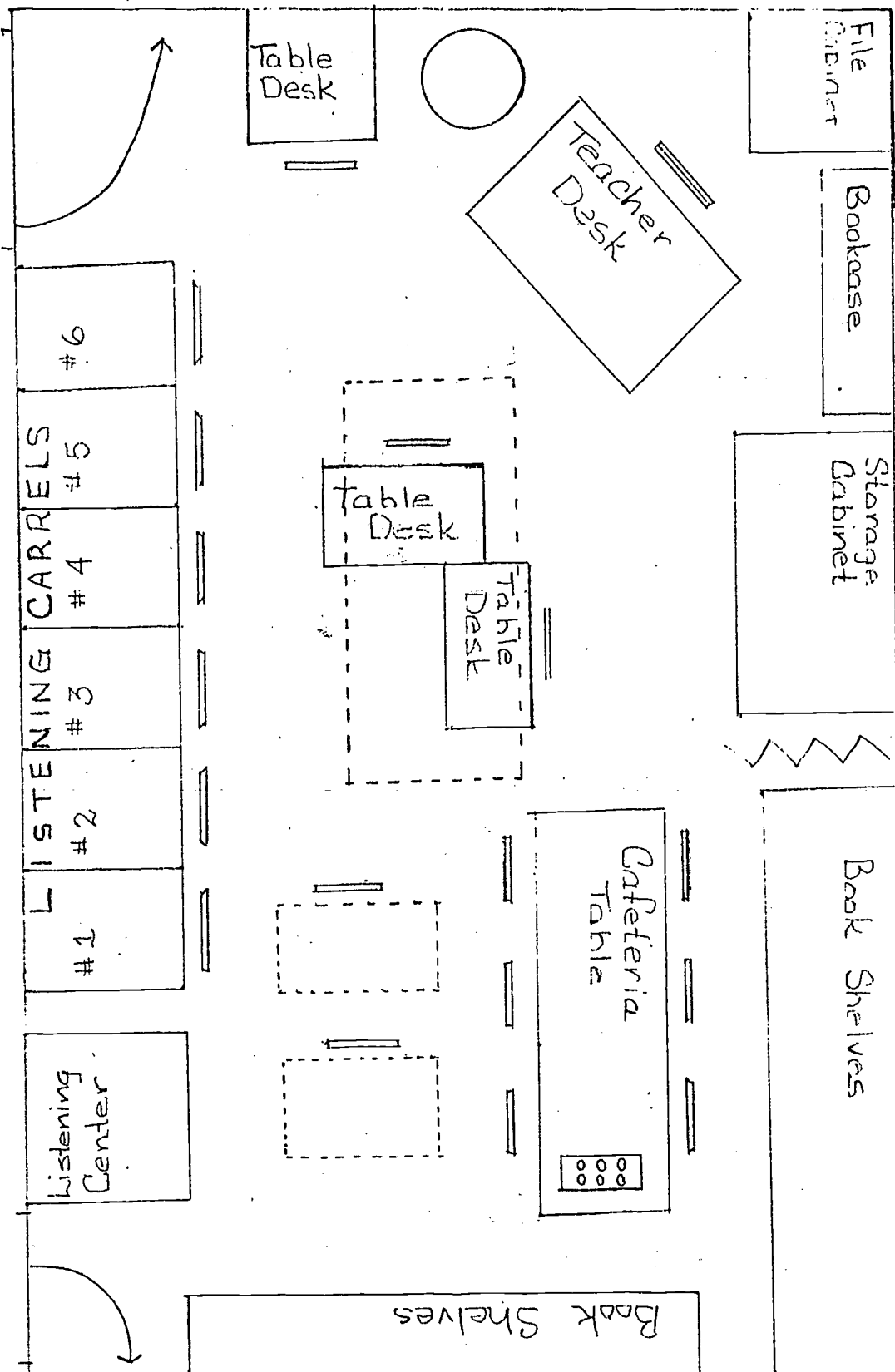
1) kinesthetic approach

2) conducted by the Speech Therapist

d. speed reading course should be considered



Floor Plan



Listening Center

Located in the rooms off the Library

----- indicates proposed cafeteria table for second listening "box" center and re-arrangement of table desks.

Corrective Reading

1. General Objectives:

The Corrective Reading program is designed to give concentrated help to those students who do not, for one reason or another, fit into the tight little compartment of normalcy, as measured by academic standards.

It is readily recognized that many students will never reach "grade level" in reading, regardless of the amount of special help they are exposed to. For these students, specific curriculum must be designed to meet their needs. A curriculum to be meaningful, appropriate, and effective must reflect three things.

- a. First, the curriculum must reflect the characteristics of the child or group of children for whom it is designed.
- b. Second, it must provide for diagnosis and remediation of reading gaps and problems.
- c. Third, the curriculum must take into consideration the educational, vocational and social prognosis of the individuals.

2. Specific Objectives:

- a. To help the student to develop the love of reading.
- b. To diagnose and remediate reading problems.
- c. To aid in the improvement of reading skills needed for learning in school, and living a useful and satisfying life.

3. Materials and Methods:

To be effective, this program must be skillfully and strictly structured, and flexible so that any student who demonstrates sufficient achievement may be moved into the "regular reading" classes at any time.

This program must administer to the education, social and emotional needs of every student. It must include materials and methods which will

assure achievement and feelings of success for each student; for those whose school experiences have been one of constant failure, there must be immediate and concrete success experiences.

4. Number of Students Receiving Services:

There are 90 students receiving Corrective Reading Service.

5. The Program:

a. Identification:

In February of each year, the corrective reading teacher administers the Gates-McGinitie Reading Test in each feeder school to fifth grade students who have been identified by their teacher as having reading deficiencies.

Those students who score below the 50th percentile in comprehension are scheduled into the corrective reading classes at the middle school level. The classes range in size from twelve to twenty students. Using the comprehension scores, they are placed in classes according to reading level; thus one class would be reading at second grade level, another at third grade level, etc.

The Gates-McGinitie test is given in August to all sixth grade students as a further check on proper class placement.

b. Structure:

The length of the class period is sixty minutes; this is much too long for sixth graders who are poor readers to concentrate on one particular activity, whether it be a story or skills.

So the hour is divided into two thirty minute segments. The first thirty minutes is used for individualized instruction which include:

- a. a group of students working with phonics tapes
- b. the teacher working with individual students, one at a time

- c. the rest of the class doing Individualized Reading from the books of their choice

The second thirty minutes is used for whole class instruction and activities related to improving reading skills.

c. Extent of Program

Many children improve enough to move into the regular grade level reading classes. But for many children, progress is slow. So it is possible for a student to be scheduled for corrective reading at the seventh grade level also.

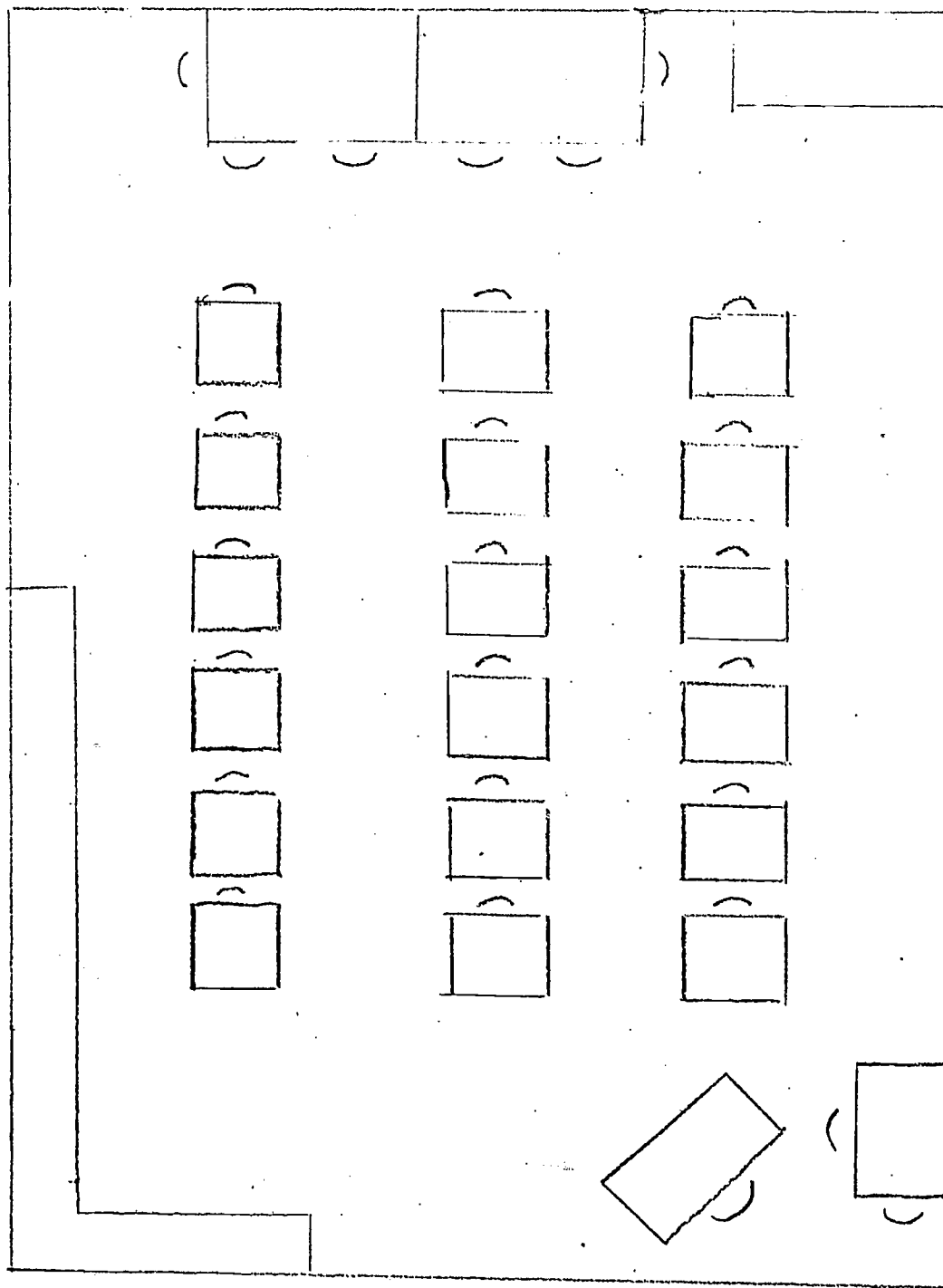
d. Evaluation

The students are given the Gates-McGinitie tests in December and May in order to assess their progress. Their grades in academic subjects are checked for evidence of progress.

Perhaps the most valuable evaluation is done by the students themselves; most had never read a book independently before coming into corrective reading classes. Because of the immediate availability of many books on every reading level, the provision of a quiet time for reading, and encouragement from the teacher, many children will read independently from fifty to a hundred books during the school year and become hooked - - - hooked on books.

Room 217

This room, located in the seventh grade wing, has listening stations, an area for one-to-one instruction, a library, and desks for each student.



Occupational Orientation for the Handicapped

1. Objectives:

a. General

- 1) To provide learning experiences whereby the student is enabled to have a better understanding of the World of Work and himself or herself and be able to make meaningful and informed educational and occupational choices
- 2) To provide learning experiences regarding hazards, benefits, joys and sorrows with all occupations and each student's chosen occupation

b. Specific

- 1) To investigate the fifteen occupational clusters
- 2) To appraise student interest and aptitudes
- 3) To study procedures for locating jobs
- 4) To study correct procedures of writing application letters, resumes, and application forms
- 5) To learn appropriate behavior for job interviews

2. Materials and Methods:

a. Materials

- 1) Career Bingo
- 2) World of Work Game
- 3) Tell It Like It Is Game
- 4) Careers Game
- 5) Society Today Game
- 6) Popeye Comics on 16 Occupational Clusters
- 7) Occupational Outlook Handbook
- 8) VIEW - VITAL Information on Education and Work (Regular materials and VIEW for the Handicapped)

- 9) Occupational Notebook Program
- 10) Occupational essentials
- 11) Getting a Job
- 12) Getting That Job
- 13) You and Your Occupation
- 14) Keeping That Job
- 15) You and Your Pay
- 16) Career Orientation Guide of Bryan Independent School District
- 17) Course Outline of Occupational Investigation in Career Education
(Commerce, Texas)
- 18) Bread and Butterflies: A Curriculum Guide in Career Development
- 19) Career Information Handbook
- 20) SRA Occupational Brief Kit

b. Methods

- 1) Movies
- 2) Filmstrips
- 3) Tape Recordings
- 4) Group Discussions
- 5) Guest Speakers
- 6) Field Trips

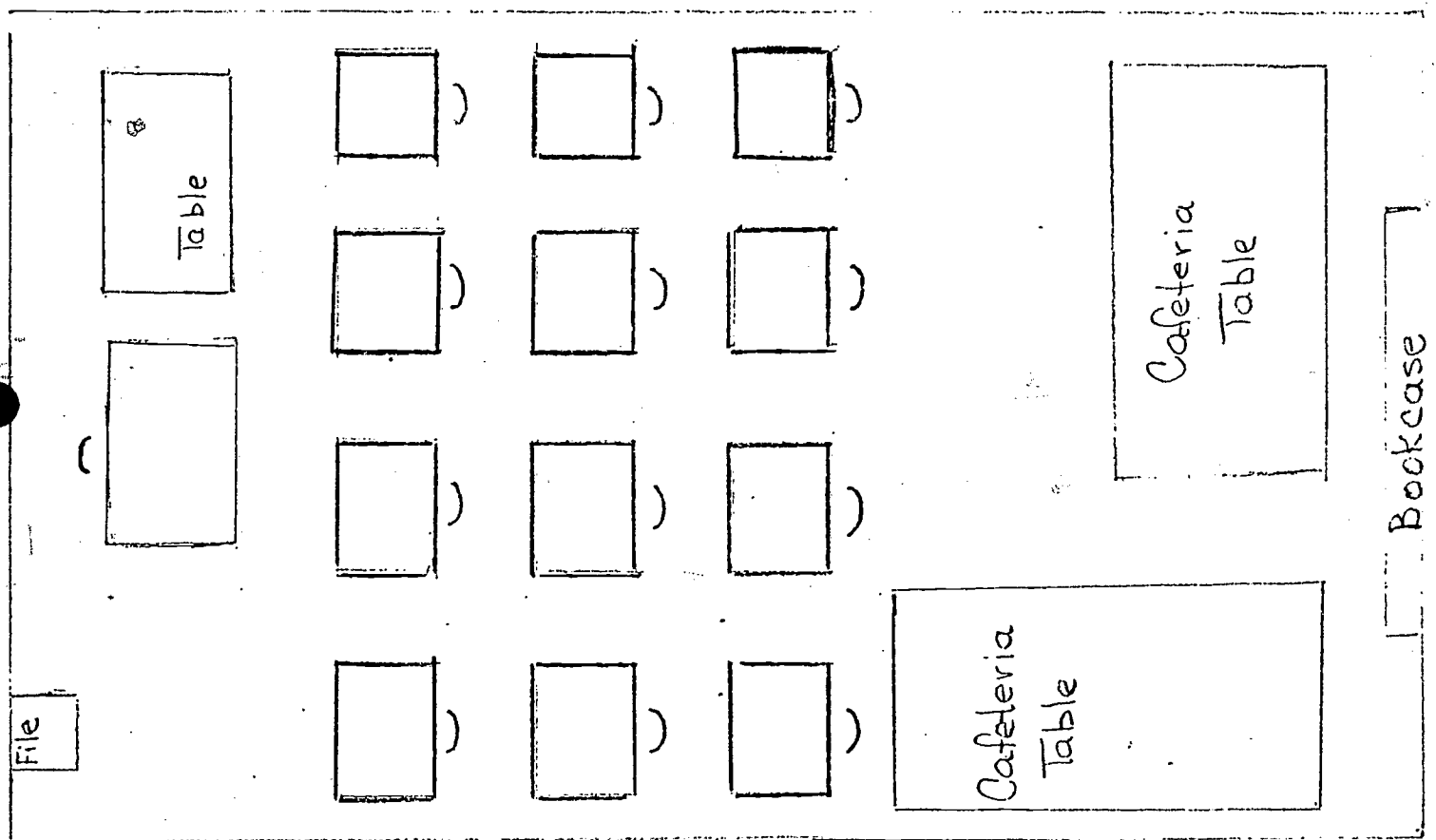
3. Number of Students Receiving Services

Forty students are served by this program.

4. Further Recommendations:

- a. This program could be better carried out in a separate classroom
- b. A permanent movie screen should be available in the classroom.
- c. Class size be kept at a maximum of 12 students.

Recommended Floor Plan



Adaptive Resource Academic

1. Objectives:

- a. The purpose of the Adaptive Resource Class is to provide environmental and curriculum modifications to fill cognitive and affective needs of each particular student.
 - 1) to provide success experiences, academically and socially.
 - 2) increase students' abilities to respond in various situations in appropriate manners
 - 3) increase students' abilities to recognize, order and fulfill their responsibilities
- b. The specific purposes of the Adaptive Resource Academic Class are as follows:
 - 1) providing individual curricula for mathematics, language arts, social studies and science for specific grade levels
 - 2) providing academic support as a resource for regular, basic and lab classes.
 - 3) providing individual contracts that outline academic objectives by the day and subject;
 - 4) providing a system of reward (point earning and trading for privileges or activities) for academic work completed
 - 5) providing behavior contracts to help students understand what positive behaviors are appropriate and what negative ones are not desired.
 - 6) providing discussion periods weekly concerning values, feelings or ideas

2. Materials and Methods:

Materials and methods are chosen to reflect characteristics of the student being served at any particular time.

a. Methods

- 1) Behavior modification techniques of W. Glasser, M. Hunter, T. Pratt.
- 2) Math teaching goals and techniques of M. Garton, B. Baumgarten, N. Haring.
- 3) Language disability teaching techniques of Bush, Blackwell, Fernald and Fitzgerald.

b. Materials

- 1) Come Along Reading Series
- 2) Dr. Spello & Conquests of Reading Series
- 3) Currently used texts in all subject areas
- 4) Lower level texts in all subject areas
- 5) Red Midnight and Falcon of Lightning audio reading series (Region XX)
- 6) Individual lesson plans -- formal contracts for each hour of class time when needed
- 7) Story Go Round audio reading kit
- 8) Women Who Win
- 9) People Profiles Audio Series
- 10) Webster Dictionaries (3 levels)
- 11) Concept in Science grade 6
- 12) Typewriting for Elementary Children (Vol. 1,2,3)
- 13) Webster Classroom Reading Clinic
- 14) Wildlife Reading Adventure Series (Vol. 1-12)
- 15) The Social Sciences - grade 6
- 16) Projections in Literature - grades 7-8
- 17) Riders on the Earth - grade 6

- 18) SRA Comprehensive Reading Series (Levels G-I)
- 19) Botel Spelling and Writing Patterns (Demo. Kit B)
- 20) Individual Instruction in Mathematics Activity Cards
- 21) Turner Livingston Communication Series
 - a) movies
 - b) phone calls
 - c) Television
 - d) Letters
 - e) Newspapers
 - f) Speaking
- 22) Spirit masters
 - a) Modern Arithmetic (Grades 2A-4B)
 - b) Our Living Language (Grades 3-4)
 - c) Hayes Language Drills (Grades 2-4)
- 23) Games

a) Net Results	g) Careers	m) Smog
b) Monopoly	h) Clue	n) Jig-saw puzzles
c) Chess	i) Scrabble	o) Mystery Date Game
d) checkers	j) Candy Land	p) Game of the States
e) Stratego	k) Chip Trading	
f) Life	l) Score Four	

3. Number of Students Receiving Service

Number of students served on an hourly basis ranges from 4-8 on a daily basis 40.

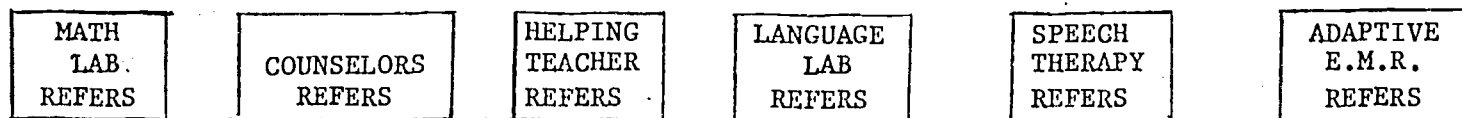
4. Further Recommendations

- a. Desk style calculator for students to check and complete math assignments with a goal of understanding functions rather than laboring with multiplication facts or using fingers.

b. Social Studies Lab

- 1) Students in resource programs are not currently exposed to Texas and Early American history because they are not able to survive in regular classrooms for their grade levels.
- 2) These students would profit greatly from modified classroom experience relying on special education techniques to present Texas and American History.

5. Flow Chart (See next page)



STUDENT IS PLACED
IN
ADAPTIVE RESOURCE CLASS

TEMPORARY
PLACEMENT

ADMISSIONS,
REVIEW AND
DISMISSAL

PROVIDE APPROPRIATE SCHEDULING FOR THE STUDENT
1, 2, 3, OR 4 PERIODS AND/OR
INTERMITTENT SCHEDULING

USE ONE OR A COMBINATION OF SEVERAL APPROACHES
ACCORDING TO INDIVIDUAL NEED

TRY ANOTHER
COMBINATION/
CONTINUE SAME

ADAPTIVE RESOURCE
ACADEMIC CLASS

DEVELOPS AND
PROVIDES INDIVIDUAL
CURRICULA FOR
INSTRUCTION

MATH
LANGUAGE ARTS
SOCIAL STUDIES
SCIENCE

PROVIDE ACADEMIC
SUPPORT FOR
CLASSES AS
RESOURCE

REGULAR
BASIC
LAB

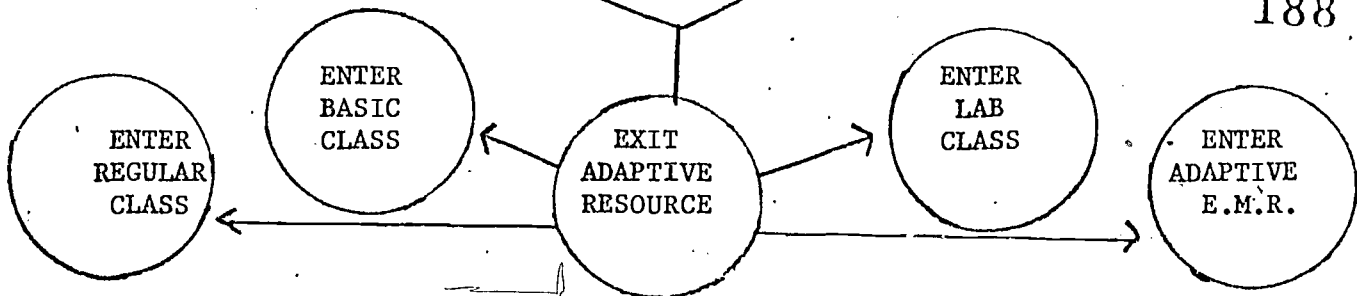
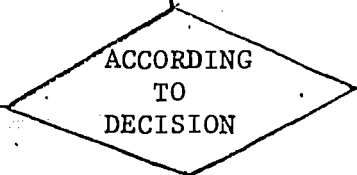
TEACH STUDENT
SELF-MANAGEMENT
TECHNIQUES

MATH
LANGUAGE ARTS
COMMUNICATION
HOMEMAKING
ARTS & CRAFTS
WOODWORKING

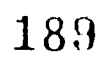
ADAPTIVE RESOURCE
VOCATIONAL CLASS

DEVELOPS AND
PROVIDES
INDIVIDUAL
CURRICULUM ON
FUNCTIONAL
BASIS

EVALUATE EFFECTIVENESS OF THESE
METHODS FOR THE STUDENT



188



Adaptive Resource - Vocational

1. Objectives:

- a. Provide a life experience and vocationally oriented program.
- b. Provide those experiences which will enable the student to function effectively in daily life and the world of work.
- c. Build self-esteem by having the student engage in tasks which he can perform successfully and build upon and reinforce his strengths.
- d. Endeavor to have the student master reading and math skills necessary for the solution of problems of everyday life.

2. Materials:

a. Equipment

- 1) Kitchen and equipment
- 2) Workbench and tools
- 3) Scrap lumber
- 4) Sewing machine

b. Books

- 1) Map Skills for Today - C-5
- 2) Focus on Pollution - C-12
- 3) Reading All Around Us
 - a) Shops & Services 16
 - b) Markets and Menus 16
 - c) Trips & Travel 16
- 4) Texas Your States Story 11
- 5) Professional Publications:
 - a) Strategies for Teaching Exceptional Children
 - b) Diagnosis of Reasoning in Mentally Retarded

c. Games

- 1) Pay the Cashier
- 2) Count Your Change

- 3) Say it - Addition, Subtraction, Multiplication, Division
- 4) Know Your States
- 5) Mathematics Laboratory #1

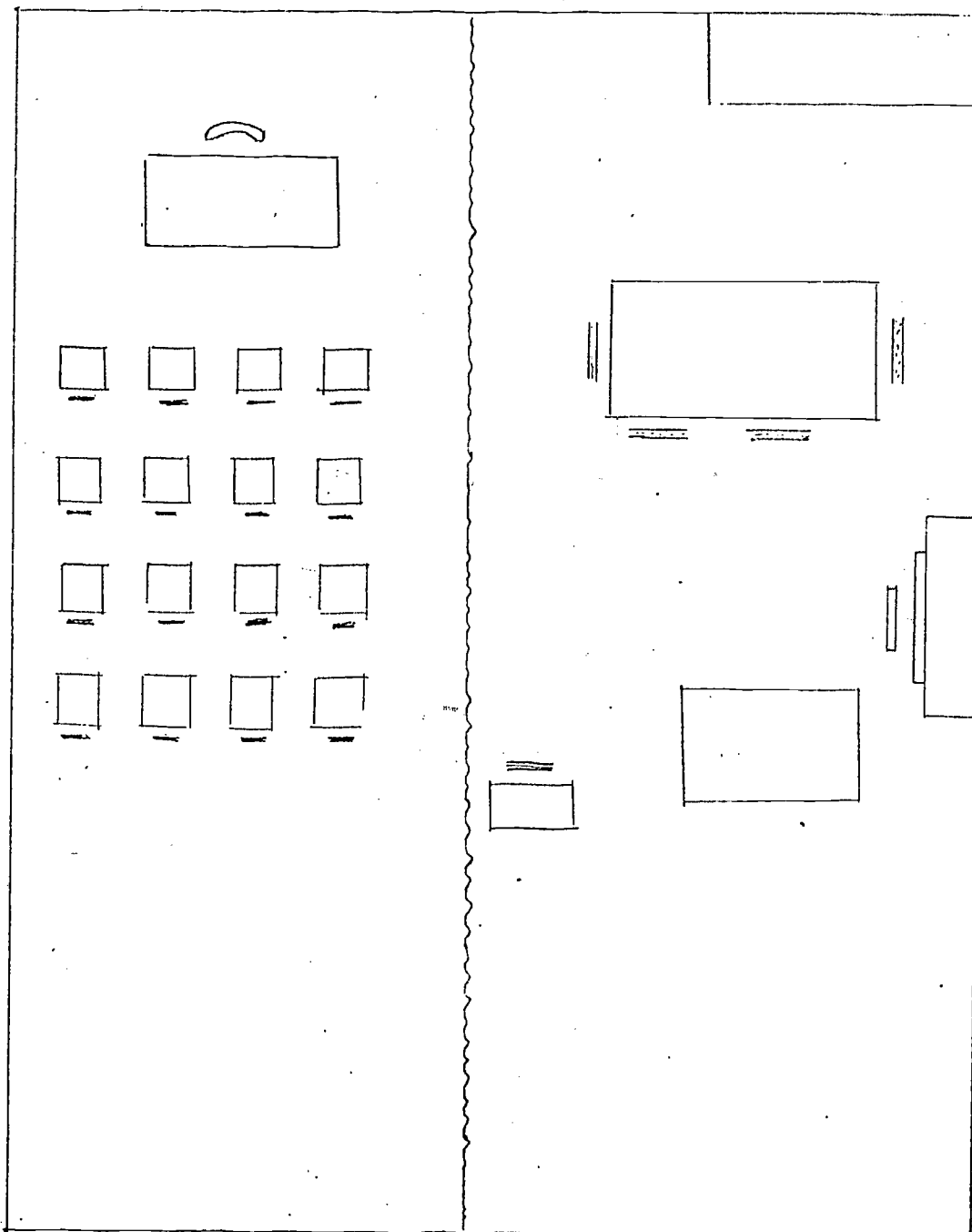
3. Methods:

- a. Use cooking, woodworking, sewing, etc. as avenues by which math and reading skills are used and reinforced.
- b. Use newspapers, telephone directory, catalogues, brochures as sources of information.
- c. Learn to use and tell time, handle money, figure costs, compare prices, use measurement.
- d. With the project approach, the student learns responsibility, self-discipline, the ability to carry a task through to completion and the satisfaction of seeing a job well done.

4. Number of Students Receiving Service:

Twenty students are served by this program.

5. Floor Plan (See next page)



Kitchen, Woodwork area

Helping Teacher

1. Objectives:

- a. To strengthen inadequate egos
- b. To teach students to organize academic tasks
- c. To teach students to recognize and more frequently perform appropriate Social behaviors

2. Methods:

- a. providing group discussions in which students may express and clarify their values, feelings and/or opinions as well as be exposed to varied ideas for dealing with various life situations;
- b. providing individual conferences with Helping Teacher for ordering or organizing academic and/or behavioral tasks through use of contracts with mainstream classes;
- c. providing relaxation or "wind down" time for some students;
- d. providing tutorial support in some students' less strong academic subjects;
- e. providing life space interviewing in crisis situations

3. Materials:

a. Books

- 1) Winners and Losers
- 2) People Making - Virginia Satir
- 3) Values Clarification - Simon
- 4) Coping With Series
- 5) Why Am I Afraid To Tell You Who I Am? - Powell
- 6) T.A. for Kids (workbooks)
- 7) Introduce Yourself to Transactional Analysis - A.T.A. Primer
- 8) Reality Therapy - Glasser
- 9) Parent Effectiveness Training
- 10) Educating Emotionally Disturbed Children - Dupont

11) Conflict in the Classroom - Long et al

12) People Making - Virginia Satir

13) When We Deal With Children - Redl

b. Posters

1) The Many Faces of Youth

c. Inventories

1) Key Math Diagnostic Test

2) The Murphy Inventory of Values

d. Games

1) Why Am I Afraid to Tell You Who I Am Cards

2) My Cup Runneth Over - Value Game

3) Can of Squirms - Values role playing

4) TIMAO - Value Game

5) Cruel, Cruel World - Value Game

6) Password

7) Aggravation

8) Checkers

9) Jigsaw puzzles (3)

4. Number of Students Receiving Service:

Twenty students receive the services on a daily basis. Anywhere from 5 - 15 may come to the Helping Teacher class on a crisis or drop-in basis.

5. Recommendations:

The Helping Teacher would recommend the following components to continue in the Helping Teacher program:

a. That students be scheduled into Helping Teacher class, allowing teacher and student to build a rapport

b. That the Helping Teacher be supported by an aide at least three periods a day.

- c. That the Helping Teacher have access to psychologists, counselors and/or other mental health consultants for support and alternatives.
- d. That the Helping Teacher have access to inservice programs on current methods and trends in working with students' behaviors.
- e. That the Helping Teacher class have some informal non-institutional furniture in it such as a couch, rug, arm chair, etc.

STUDENT ENTERS H E L P I N G T E A C H E R C L A S S

A N A L Y Z E

WHAT PART OF
HIS LIFE
AFFECTED

SELF CONCEPT

WHAT AREAS
NEED HELP

NATURE OF
STUDENT
(personality)

NATURE OF
STUDENTS SITUATION
(environment)

CONTRIBUTING
FACTORS

LENGTH OF TIME
PROBLEM PRESENT

DECIDE UPON ONE OR
COMBINATION
OF SEVERAL
INTERVENTIONS

REGULAR BASIS

ACCORDING
TO
DECISION

INTERMITTENT

PROVIDE LIFE
SPACE
INTERVIEWS

SUPPORT
INADEQUATE EGO

HELP STUDENT
CLARIFY, VALUES
OPINIONS

USE COMMUNITY
RESOURCES

SOCIAL
WORKER

PSYCHOLOGIST

ORGANIZE
ACADEMIC TASKS

WITH
PARENTS' HELP

WITH
TEACHERS' HELP

WITH INVOLVED
STUDENT HELP

ORGANIZE
BEHAVIORS

WITH
PARENTS' HELP

WITH
TEACHERS' HELP

WITH INVOLVED
STUDENT HELP

WITH PEERS'
HELP

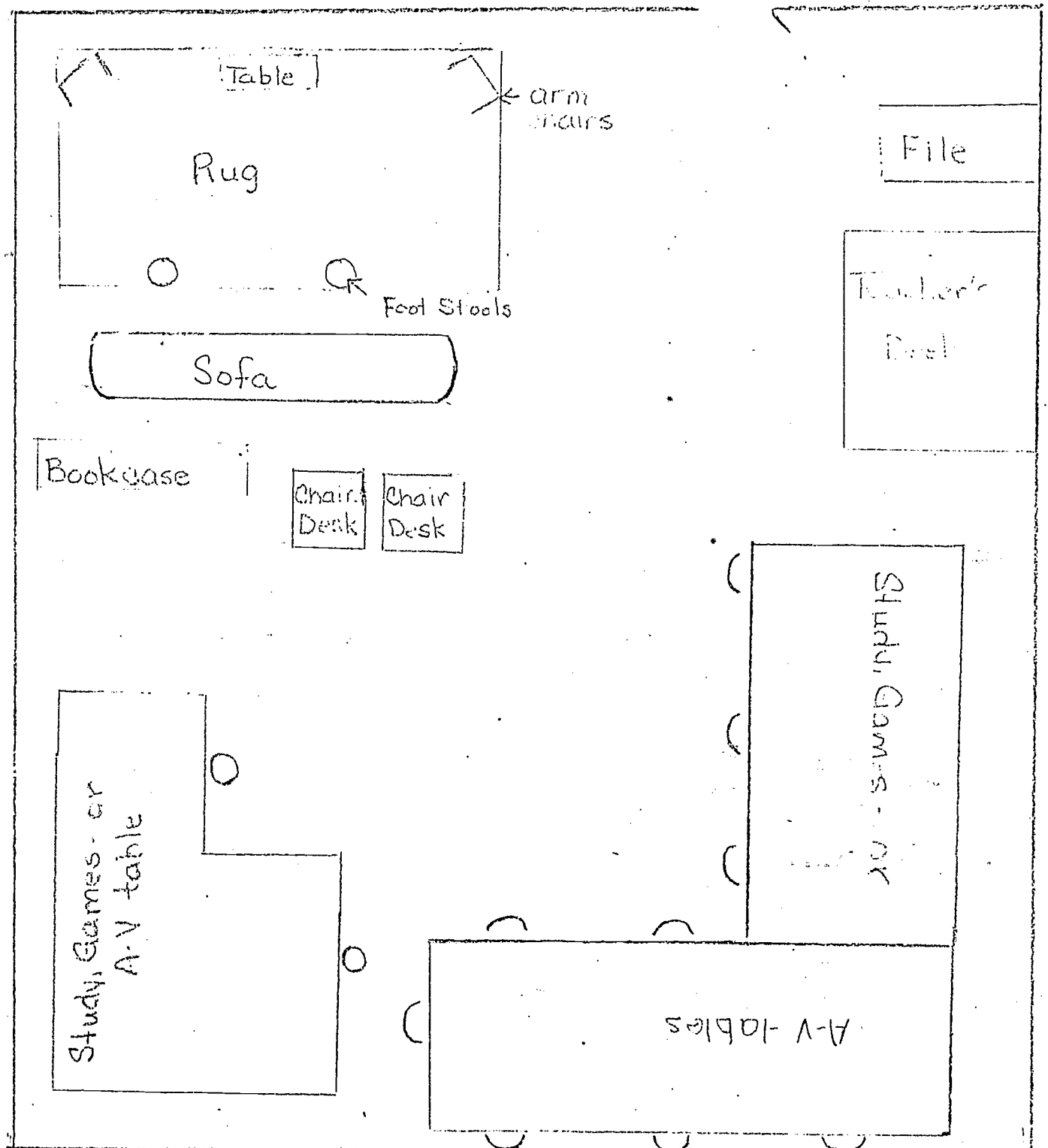
CATCH UP FROM
LONG ABSENCES IF
EMOTIONAL OVERLAY

EVALUATE EFFECTIVENESS OF INTERVENTION

ACCORDING
TO
DECISION

STUDENT EXITS TO R E G U L A R C L A S S R O O M

Present Recommended Floor Plan



SCHERTZ-CIBOLO-UNIVERSAL CITY INDEPENDENT SCHOOL DISTRICT

ADMINISTRATIVE OFFICE

1060 AERO AVENUE -:- AREA CODE 512 / 658-3553

SCHERTZ, TEXAS 78154

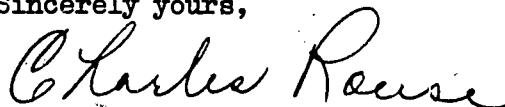
May 28, 1975

To whom it may concern:

Several members of our staff visited schools in the Northeast Independent School District utilizing the Learning Lab concept. We were impressed with the structure of the program and, after considerable study, decided to proceed with implementation of the Learning Lab concept at Samuel Clemens High School. This program has facilitated learning for many of our students during the school year, and it is our intention to expand and streamline the program.

During our bi-monthly meetings, members of the Learning Lab staff, administrators, and counselors at the high school reached the concensus that improvement has been shown by students in both cognitive and affective areas.

Sincerely yours,



Charles Rouse, Principal
Samuel Clemens High School

SAMUEL CLEMENS HIGH SCHOOL

800 LIVE OAK ROAD -- AREA CODE 512/658-3551
SCHERTZ, TEXAS 78154

Samuel Clemens Learning Laboratories

WHY:

1. Reviews of failure lists, student cumulative records, and interviews with many students, teachers and Special Education Personnel clearly showed that a substantial number of students were unable to cope with the standard high school curriculum.
2. An evaluation of the existing program reflected individual cases of excellent results and outstanding contributions by different staff members on different occasions. But, the total effort lacked cohesion and effective team effort.
3. We believed that changing the direction of our operation to a more centralized system would result in an effective unification of individual efforts and provide a cohesive, integrated program that would be more responsive to more students.

GOALS:

1. To integrate the Special Education Students into the program for more success on their part.
2. To make basic courses available to students having problems in such a way as the student will succeed.
3. To proceed at each student's rate.
4. To build curriculum in small, progressive steps.
5. To supply success where failure has been common.
6. To create a program which will comply with the state T.E.A. standards for high school graduation.

TEACHING TEAM:

1. Four laboratories - two teachers each. Four large rooms are used, arranged together in one wing of the school.
2. Of the two teachers in each classroom, one teacher is certified in the specific teaching field, while the other is certified in a Special Education field.
3. The two teachers work as a team, and as individuals, depending upon each teacher's skills and student's needs. Classes are often broken into groups according to reading levels or knowledge in the particular field.

4. One full-time aide is employed to help the lab teachers. The aides' responsibilities cover both clerical and instructional duties.
5. Much peer teaching and tutoring is used to supplement the assigned teachers. Several student aides are used, normally two per lab, some of which receive high school credit for their work.

SCHEDULE:

1. The year is divided into three trimesters. Classes are 80 minutes in length.
2. Students normally take four classes per trimester, some take five.
3. Teachers have four classes one trimester and three for the remaining two trimesters, for a total of ten classes per year.
4. All lab personnel are free during the same time slot to allow for planning and coordination of goals for the students.

STUDENT BODY

1. All classified Special Education Students are included in the program.
2. Previous failure lists from the core courses were consulted and students were transferred into the lab.
3. Teacher referrals during the year are also used to augment the laboratories' roles.
4. Therefore, we have a collection of students who don't seem to be able to function in a "normal" classroom. These students are required to produce work which is new for some of them, beginning at their own level.
5. We try to maintain a balanced ratio between Special Education Students and regular students.
6. Of the four labs, some students are involved in only two or three of them. Few students are enrolled in all four labs. See statistics below:
(Winter Trimester 1974-75)
Total population - 175 students
Students in all 4 labs: 3
Students in 3 labs: 48
Students in 2 labs: 45
Students in 1 lab: 76
Students using the English lab: 94
Students using the Physical Science lab: 91
Students using the Math lab: 85
Students using the Social Studies lab: 81

BUDGET:

1. Expenses are shared by the High School and Student Resources.
2. Lab fees are also collected from each student to cover the cost of some of the consumables and special materials. (Usually 50¢ per student)

ENGLISH LAB:

Students need English 1,2,3,4,5,and 6 to graduate, two levels per year. (All are offered in the lab.)

1. Core curriculum is based upon the reading anthologies used in the regular classrooms. (Reading is done in reading level groups, at different rates.)
2. Many supplementary materials are used, employing contracts made with each student. The teachers attempt to form these contracts to meet each student's needs. The student decides what can be accomplished in six weeks and what sort of grade should be received for that amount of work. This puts the responsibility of the amount of work and grade upon the student.
3. Writing assignments are also made, beginning with basic paragraphs. Each student is required to complete a certain number during each 6-week period.

MATH LAB:

Students need FOM 1,2,3, and 4 to graduate, two levels per year. (All are offered in the lab.)

1. Basic text: Sullivan Associates, McGraw-Hill, 15 levels with placement test used with the most basic students. Students progress at their own rates, and are checked daily. Work records are recorded in a log to keep track of their progress. The student always knows where he is.
2. Shea, Essentials of Math: Medium difficulty, each student must receive 80% on tests to go on to next level.
3. Steins refresher mathematics; Allyn and Bacon-diagnostic kit in itself. Most difficult level used in the lab.
4. Grades are very available to students. Individual study carrells are used in which individual students may listen to taped programs in privacy.

SCIENCE LAB:

Students need Physical Science 1 and 2 to graduate.

(Both are offered in the lab.)

The Physical Science Learning Lab is a two semester science course designed to fulfill the science requirements for high school graduation as created by T.E.A. Students learn by completing each of the various activities used for a particular unit. An average of 15 activities are set up for each of the topics covered. The topics studied in the Physical Science Learning Lab are these: scientific method; metric system; machines; force, energy, and work; fluids; nature of matter; electricity and magnetism; light and color; and sound.

The activities are either done individually or presented to a small (4-5 students) group. An example of an individual activity is answering questions about an appropriate filmstrip. A group activity would be an experiment supervised by a teacher.

1. Materials: Singer Visual Aides
Educational Progress Corporation
The tapes are very useful.
Workbook-This Earth is Ours, Steck-Vaughn
2. As in the other labs, most of the work is done on the students' own paper, thereby making use of classroom sets of materials. Therefore, consumables are not consumed.
3. Units are divided into five or six different activities. Each student does at least two activities a day, unless a class discussion is involved.
4. Pre-tests are given at the beginning of each unit in addition to needed vocabulary for the unit.
5. Examples of possible activities:
 1. tape
 2. filmstrip
 3. movie
 4. pamphlet reading
 5. experiment
 6. workbook
6. Standard textbook is followed in outline, with supplementary materials to suit the students: Physical Science Investigations, Eigenfeld and Hogg.
7. Core Curriculum will eventually be Spaceship Earth - Physical Science, Houghton-Mifflin Co. Boston, a high interest, low level vocabulary text.

HISTORY LAB:

American History 1 and 2 and World History 1 and 2 are needed to graduate. (All are included in the lab)

1. Scholastic's American History in four volumes, serves as the core curriculum.
This set of materials are well suited to the lab as it includes high interest books, with many supplementary materials. Lessons are arranged in small progressive steps.

2. World History: The standard text, Living World History, Scott Foreman along with a second text, World History, Follett, serve as the core curriculum. These are supplemented by various materials gathered together in the form of learning packets. Supplementary materials include Wollensok Teaching Tapes, McGraw-Hill Captioned Filmstrips, Fenton-Wallbank Overhead Transparencies, and DEMCO-Miller-Brody Filmstrip and Cassette Program. The students are expected to complete a certain amount, and then may add further lessons to increase their grade. The time involved in forming these packets is justified by their great usefulness.
3. American History: Four paperback text, along with sound film strips, posters and lab sheets on the texts, present a review of the years from 1690-1860 and more in-depth coverage of the years from 1860 to the present. Students are individualized by the rate the work is covered and peer tutoring and individual help are employed. Supplementary material is drawn from the adopted text used in regular classes. Lab sheets emphasize interpretation of maps, charts, and cartoons; vocabulary; comprehension of text; and expressing personal opinions.

VOCATIONAL ADJUSTMENT CO-OPERATIVE PROGRAM:

The VAC program is a three-part program in connection with Texas Education Agency, Texas Rehabilitation Commission and the local school district. It is a very flexible program designed to meet the vocational needs of identified handicapped students. The handicapping condition may be physical, mental, or emotional and to a degree that it will be detrimental to keeping gainful employment without extra help. The VAC program is a work-study program that picks up a student at age 16 and may keep him until age 21. When the student is ready, he may be placed in an on-campus job, a part-time off-campus job, or during the final year, in an off-campus full-time job. The student is eligible for regular vocational programs within the high school, if recommended by the Admission, Review, and Dismissal Committee. Students are referred to Texas Rehabilitation Commission at some point before they are ready to go out for On-Job-Training and or graduate, Rehab then continues services to the client after he leaves school for whatever services he needs. We have one VAC class where the students receive practical, job-orientated instructions in money management, taxes, job applications and interviews, social adjustment, and self-maintenance. There is also a plan for graduation in which the student works full-time in an off-campus job, where he expects to continue working after graduation, for at least 4 1/2 months prior to graduation. This plan can be used when continued attendance in regular academic classes is of no further benefit to the student. He is eligible for a diploma and full graduation participation. The type work he has done is shown on his transcript.

LAB SCHEDULES - SPRING TRIMESTER (1975)

7:45 - 9:05 - 1st Period

English 4	Bednarz - Albach	rm. 103
FOM 2	Peck-Dolford	rm. 107

9:10 - 10:30 - 2nd Period

English 2	rm. 103
FOM 4	rm. 107
World History 2	Berry-Pierce rm. 105
Physical Science 2	Kern-Shelton rm. 106

Advisory 10:35 - 10:45

10:50 - 12:10 - 3rd Period

VAC Platz	rm. 235
English 4	rm. 103
U.S. History 2	rm. 105
FOM 2	rm. 107
P. Science	rm. 106

Lunch 12:10 - 12:50

12:55 - 2:15 4th Period

Planning Period

2:20 - 3:40 5th Period

Physical Science 2	rm. 106
W. History 2	rm. 105

LAB STAFF

ENGLISH

Anne Bednarz-Department Head
Karolyn Albach-resource

SCIENCE

Stephanie Kern
Clara Shelton-resource

HISTORY

Robert Berry
Nancy Pierce-resource

MATH

James Peck
Marion Dolford-resource
Beverly Platz

VAC

Standard Syllabus (English Department)
This is followed as closely as possible in the English Lab.

GRAMMAR

English I Verbs voice
 tense (simple)
Capitalization
Punctuation
Agreement
Fragment Run-on
Vocabulary
Exercise punctuation review

English II Clauses
Paragraph development
 (underline topic)
Transities
Comparison
Description
Short theme
Vocabulary

English III Verbs; mood
 tense (perfect)
Punctuation-quotation marks
 dash
 parentheses
Comma-blunder
Short themes
Usage: word choice
Vocabulary

English IV Review is necessary
3-5 paragraphs
Outline

English V Class determination
Fallacies
Generalizations
Thesis Sentence
300-500 word theme with outline
Minumum of 3 themes

English VI Parellellism
Topic and Sentence outline
Review of English
300-500 word theme with outline
Minumum of three themes
Library research

LITERATURE

Short stories
Romeo and Juliet
Mythology

Novel
Poetry
At Random
Biography
Autobiography

Short Story
Poetry
Biography
Autobiography

Medieval Tales and Legends
Julius Caesar
Modern essays
Novel
Essay and essayists

Planters and Puritans (all)
Founders of the nation
 Franklin
 Paine
Early National Period (all)
 Deerslayer
America's Golden Day
 Emerson and Thoreau
Conflict-Waltman
New Outlooks (all)

20th century
Modern short story (all plus
 other selections)
Modern drama (all plus other
 slections)

GRAMMAR

English VII Class determines-individual
instruction

English 1-6 review
Thesis sentence
The detailed outline
Logic-inductive and
deductive
Informative theme
Comparison-Contrast theme
Critical essay

English VIII Persuasive writing
Argumentative writing
Library
Research paper
Review

Novels for classroom available in English office:

Ivanhoe
Deerslayer
Bridge over San Luis Rey

Huckleberry Finn
Oliver Twist
Mayor of Casterbridge

Silas Marner
The Scarlet Letter
The Crucible

LITERATURE

Anglo-Saxon
Medieval
Elizabethan - Hamlet
Seventeenth Century
Novel

Eighteenth Century
Triumph of Romantic Revolt
Victorian Age
Development of the Novel

Optional:
16 short stories
Modern poetry
Pygmalion
Novel

GENERAL CONCLUSIONS:

As in any new program, we are continually changing goals and techniques. However successess this year have been wonderful. With descriptions of rooms, schedules and materials, perhaps the most important element of the labs has been omitted. We have found that individual attention and interest are the most important ingredients for the success of our lab students. All of the other accoutrements are merely helpful supplements.

CRITIQUE - LEARNING LABS:

As a new department it is felt that the learning labs functioned very well at Samuel Clemens. Many students improved their skills, some remarkable. Several suggestions follow for next year.

1. More parent contact is encouraged. Their involvement in and understanding of the labs is needed.
2. The eighty-minute classes are found to be a problem in some labs. It is suggested that many activities be made available to the students, as their attention spans are quite short in most cases.
3. A departmental policy was agreed upon that non-producing students will be transferred out of the labs. The labs are not designed to handle students who are merely discipline problems.
4. It was suggested that our set of standards be revised for each lab and specified more clearly. These standards will be accomplished by all students in the lab. The standards will clarify failure or removal from the lab.
5. If a student is placed in the learning lab and the teacher feels he is eligible for Special Education an early comprehensive assessment should be made. This will help in determining his future educational plan.

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SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

SEPTEMBER 16, 1974

CITATIONS PRINTED = 16

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SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

ED- EJ092826

CH- EC060724

AU- VAN OSDOL, B. M.; JOHNSON, D. M.

TI- THE SOCIOMETRIC STATUS OF EDUCABLE MENTALLY RETARDED STUDENTS IN
REGULAR SCHOOL CLASSES

PD- SEP 73

SO- AUSTRALIAN JOURNAL OF MENTAL RETARDATION; 2; 7; 200-3

DE- *EXCEPTIONAL CHILD RESEARCH; *EDUCABLE MENTALLY HANDICAPPED

DE- *PEER ACCEPTANCE; *REGULAR CLASS PLACEMENT; MENTALLY HANDICAPPED

DE- ELEMENTARY SCHOOL STUDENTS; JUNIOR HIGH SCHOOL STUDENTS

DE- SOCIOMETRIC TECHNIQUES

ED- EJ087841

CH- EC060107

AU- VOGEL, ARNOLD L.

TI- INTEGRATION OF NINE SEVERE LEARNING-DISABLED CHILDREN IN A JUNIOR
HIGH SCHOOL CORE PROGRAM

PD- F 73

SO- ACADEMIC THERAPY; 9; 1; 99-104

DE- *EXCEPTIONAL CHILD EDUCATION; *LEARNING DISABILITIES

DE- *PROGRAM DESCRIPTIONS; *REGULAR CLASS PLACEMENT; *PROGRAM EVALUATION

DE- JUNIOR HIGH SCHOOL STUDENTS; SCHEDULING

ED- EJ087813

CH- EC060032

AU- RUSSELL, GENE H.; BUTLER, DAVID M.

TI- THE FIVE-COUNTY VOCATIONAL SKILLS TRAINING PROGRAM, 1970-1972

PD- SEP 73

SO- NEW OUTLOOK FOR THE BLIND; 67; 7; 301-8

DE- *EXCEPTIONAL CHILD EDUCATION; *VISUALLY HANDICAPPED

DE- *VOCATIONAL EDUCATION; *REGULAR CLASS PLACEMENT

DE- *CASE STUDIES (EDUCATION); SENIOR HIGH SCHOOLS; PROGRAM DESCRIPTIONS

AB- AFTER REVIEWING THE HISTORICAL BASIS FOR THE MODERN TREND TOWARD
INTEGRATING VISUALLY HANDICAPPED SECONDARY STUDENTS INTO VOCATIONAL
SKILLS TRAINING PROGRAMS IN THE PUBLIC SCHOOLS, THE AUTHORS DESCRIBE
A 3-YEAR PROGRAM IN CALIFORNIA IN WHICH A SPECIALIST IN TEACHING
VISUALLY HANDICAPPED STUDENTS AIDED THE REGULAR VOCATIONAL SKILLS
TEACHER. (AUTHOR)

ED- ED083770

CH- EC060324

TI- A MODEL PROGRAM OF COMPREHENSIVE EDUCATIONAL SERVICES FOR STUDENTS
WITH LEARNING PROBLEMS.

PD- 73

IS- RIE74MAR

IN- UNION TOWNSHIP BOARD OF EDUCATION, N.J.

SN- NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON.

PR- EDRS PRICE MF-\$0.65 HC-\$6.58

NO- 182P.

DE- ACADEMIC ACHIEVEMENT; CLASS ACTIVITIES; ELEMENTARY SCHOOL STUDENTS

DE- *EXCEPTIONAL CHILD EDUCATION; *INSTRUCTIONAL MATERIALS

DE- *LEARNING DISABILITIES; MOTOR DEVELOPMENT; *PROGRAM DESCRIPTIONS

DE- *REGULAR CLASS PLACEMENT; SECONDARY SCHOOL STUDENTS

DE- TEACHER DEVELOPED MATERIALS; TEACHING GUIDES; TECHNOLOGY

SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

ID- NEW JERSEY

AB- PROGRAMS ARE DESCRIBED FOR LEARNING-DISABLED OR MANTALLY-HANDICAPPED ELEMENTARY AND SECONDARY STUDENTS IN REGULAR AND SPECIAL CLASSES IN UNICN, NEW JERSEY, AND APPROXIMATELY 58 INSTRUCTIONAL EPISODES INVOLVING STUDENT MADE OBJECTS FOR UNDERSTANDING TECHNOLOGY ARE PRESENTED. IN PART ONE, COMPONENTS OF THE MODEL PROGRAM SUCH AS THE MULTI-LEARNING DISABILITY CLASS, CORE PROGRAM, OCCUPATIONAL PROGRAM FOR RETARDED STUDENTS, EMPLOYMENT ORIENTATION, A PERCEPTUAL TRAINING ACTIVITY BANK, AND INSERVICE TRAINING USING A MICROWAVE TELEVISION BROADCAST SYSTEM ARE DESCRIBED. APPENDED ARE BY-LAWS FOR A TEACHER/PARENT COUNCIL, AN EQUIPMENT LIST FOR THE OCCUPATIONAL CENTER, AND DESCRIPTIONS OF VOCATIONAL/OCCUPATIONAL PROGRAMS FOR HANDICAPPED STUDENTS. IN PART TWO, TEACHER DEVELOPED REGULAR CLASS ACTIVITIES FOR THE CHILDREN'S TECHNOLOGY CURRICULUM ARE USUALLY DESCRIBED IN TERMS OF ACADEMIC AREA TO BE REMEDIATED, SOURCE OF MATERIALS NEEDED FOR CONSTRUCTION, MOTIVATION, AND PROCEDURE (DIAGRAMS ARE INCLUDED). AT THE LOWER PRIMARY LEVEL, STUDENTS ARE INTRODUCED TO USE OF BASIC TOOLS. AT THE PRIMARY AND INTERMEDIATE LEVELS, STUDENTS MAKE ITEMS SUCH AS A POTHOLDER RACK, BOOK RACK, SAWHORSE, AND BLUEBIRD HOME, OR USE THE ADDING MACHINE, CALCULATOR, AND TYPEWRITER. INCLUDED FOR INTERMEDIATE LEVEL STUDENTS ARE ACTIVITIES FOR EXPERIMENTING WITH PLANTS AND FOR BUILDING A GALVANOMETER, A WEATHER STATION, AN INCUBATOR, AN ELECTRIC QUESTION GAME, AND A WATER TABLE DEMONSTRATION MODEL. (MC)

ED- EJ081304

CH- EC051814

AU- HEHIR, RICHARD G.

TI- INTEGRATING DEAF STUDENTS FOR CAREER EDUCATION

PD- MAY 73

SO- EXCEPTIONAL CHILDREN; 39; 8; 611-8

DE- *EXCEPTIONAL CHILD EDUCATION; *DEAF; *REGULAR CLASS PLACEMENT

DE- *VOCATIONAL EDUCATION; *PROGRAM DESCRIPTIONS; AURALLY HANDICAPPED

DE- SECONDARY SCHOOL STUDENTS; SUCCESS FACTORS

ED- EJ073146

CH- EC050959

AU- IANC, RICHARD P.

TI- SHALL WE DISBAND SPECIAL CLASSES?

PD- SUM 72

SO- JOURNAL OF SPECIAL EDUCATION; 6; 2; 167-77

DE- ELEMENTARY SCHOOL STUDENTS; *EXCEPTIONAL CHILD EDUCATION

DE- *MENTALLY HANDICAPPED; *REGULAR CLASS PLACEMENT

DE- SECCNDARY SCHOOL STUDENTS; *SPECIAL CLASSES; *STUDENT PLACEMENT

ED- EJ069865

CH- EC050847

AU- MURPHY, JOHN F.

TI- LEARNING BY LISTENING: A PUBLIC SCHOOL APPROACH TO LEARNING DISABILITIES

PD- W 72-73

SO- ACADEMIC THERAPY; 8; 2; 167-89

DE- *AURAL LEARNING; ELEMENTARY SCHOOL STUDENTS

DE- *EXCEPTIONAL CHILD EDUCATION; *LEARNING DISABILITIES

DE- REGULAR CLASS PLACEMENT; *SCHEDULING; SECONDARY SCHOOL STUDENTS

DE- *TEACHING METHODS

SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

ED- EJ044330
 CH- EC033183
 AU- SCHEELINE, ALICE
 TI- INTEGRATING DEAF CHILDREN INTO PUBLIC SCHOOL
 PD- SEP 71
 IS- CIJE71
 SO- VOLTA REVIEW; 73; 6; 370-3
 DE- *AURALLY HANDICAPPED; *EXCEPTIONAL CHILD EDUCATION
 DE- JUNIOR HIGH SCHOOL STUDENTS; PERSONAL ADJUSTMENT
 DE- *REGULAR CLASS PLACEMENT
 AB- A MOTHER RECOUNTS HER DEAF DAUGHTER'S TRANSITION FROM A RESIDENTIAL SCHOOL FOR THE DEAF TO THE NINTH GRADE IN A REGULAR DAY SCHOOL. (KW)

ED- EJ029911
 CH- EC031137
 AU- SALEM, JAMES M.
 TI- PARTIAL INTEGRATION AT THE HIGH SCHOOL LEVEL
 PD- JAN '71
 IS- CIJE71
 SO- VOLTA REVIEW; 73; 1; 42-6
 DE- *AURALLY HANDICAPPED; *EXCEPTIONAL CHILD EDUCATION
 DE- PERSONAL ADJUSTMENT; *REGULAR CLASS PLACEMENT; RESIDENTIAL PROGRAMS
 DE- SECONDARY SCHOOL STUDENTS

ED- ED052551
 CH- EC032686
 TI- A FOLLOW-UP AND COMPARISON OF GRADUATES FROM TWO TYPES OF HIGH SCHOOL PROGRAMS FOR THE MENTALLY HANDICAPPED. FINAL REPORT.
 PD- OCT 70
 IS- RIE71NOV
 IN- DEARBORN PUBLIC SCHOOLS, MICH.
 SN- OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.
 PR- EDRS PRICE MF-\$0.65 HC-\$3.29
 CG- OEG-3-7-068680-0106
 BN- BR-6-8680
 NO- 70P.
 DE- *EDUCABLE MENTALLY HANDICAPPED; *EDUCATIONAL METHODS
 DE- *EXCEPTIONAL CHILD RESEARCH; FOLLOW UP STUDIES; MENTALLY HANDICAPPED
 DE- PERSONAL ADJUSTMENT; PROGRAM EVALUATION; *REGULAR CLASS PLACEMENT
 DE- *SENIOR HIGH SCHOOLS; SOCIOECONOMIC STATUS; SPECIAL CLASSES
 DE- VOCATIONAL ADJUSTMENT
 AB- COMPARED IS THE POST HIGH SCHOOL ADJUSTMENT OF GRADUATES OF TWO TYPES OF SPECIAL EDUCATION PROGRAMS FOR THE EDUCABLE MENTALLY HANDICAPPED: A SELF-CONTAINED, VOCATIONALLY ORIENTED PROGRAM SEPARATE FROM GENERAL EDUCATION (SCHOOL A) AND A PROGRAM INTEGRATED INTO THE GENERAL HIGH SCHOOL, WHERE JOB EXPERIENCE IS CONCURRENT WITH GENERAL EDUCATION AND COURSES ARE NOT SPECIFICALLY VOCATIONALLY ORIENTED (SCHOOL B). GRADUATES OF SCHOOL B WHO HAVE BEEN OUT OF SCHOOL FOR VARYING LENGTHS OF TIME WERE ALSO COMPARED WITH EACH OTHER. INTERVIEWED WERE 41 SCHOOL A AND 41 SCHOOL B GRADUATES FROM THE YEARS 1964 AND 1965, AND 114 SCHOOL B STUDENTS WHO GRADUATED BETWEEN 1952 AND 1963. STUDENTS WERE COMPARED ON SOCIAL, VOCATIONAL, AND ECONOMIC MEASURES, SUCH AS JOB PLACEMENT, TENURE, INCOME, COMMUNITY PARTICIPATION, AND OTHER FACTORS. IT WAS FOUND THAT GRADUATES OF SCHOOL B HAD A BETTER SCHOOL ATTENDANCE RECORD, HELD

SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

MORE FULL-TIME JOBS, HAD HIGHER OCCUPATIONAL LEVELS AND SALARIES, WERE MORE LIKELY TO SEEK FURTHER EDUCATION, WERE MORE PRUDENT IN MONEY MANAGEMENT, MARRIED LATER OR REMAINED SINGLE MORE OFTEN, HAD BETTER HOMES, AND PARTICIPATED MORE ACTIVELY IN COMMUNITY ACTIVITIES. (KW)

ED- ED040530

CH- EC005804

AU- STUCKLESS, E. ROSS

TI- A NOTETAKING PROCEDURE FOR DEAF STUDENTS IN REGULAR CLASSES.

PD- DEC 69

IS- RIE70NOV

IN- ROCHESTER INST. OF TECH., N.Y.

SN- DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, WASHINGTON, D.C.

PR- EDRS PRICE MF-\$0.65 HC-\$3.29

VO- 27P.

DE- *AURALLY HANDICAPPED; COLLEGE STUDENTS; *EDUCATIONAL NEEDS

DE- *EXCEPTIONAL CHILD EDUCATION; PROGRAM EVALUATION

DE- REGULAR CLASS PLACEMENT; SECONDARY SCHOOL STUDENTS

ID- NOTETAKING

AB- AN INVESTIGATION WAS DESIGNED TO EXPLORE A SYSTEMATIC NOTETAKING PROCEDURE FOR DEAF STUDENTS ON SECONDARY AND POST-SECONDARY EDUCATIONAL LEVELS. CONDUCTED IN TWO PHASES, THE STUDY AIMED AT DEVELOPING A SYSTEM OF NOTETAKING INCLUDING A SPECIAL NOTEBOOK (CONSISTING OF PRESSURE SENSITIVE DUPLICATING PAPER), AND DESCRIBING NOTETAKING PROCEDURES OF HEARING UNDERGRADUATE STUDENTS; AND EVALUATING THE NOTETAKING SYSTEM RELATIVE TO THE WILLINGNESS OF HEARING STUDENTS TO PARTICIPATE AND THE EXPRESSED SATISFACTION OF DEAF STUDENTS WITH ITS PROCEDURES. IN BOTH PHASES, THE SYSTEM WAS EVALUATED BY DEAF AND HEARING PARTICIPANTS, WHO COMPLETED APPROPRIATE QUESTIONNAIRES. ANALYSIS OF THE DATA INDICATED THE GENERAL FEASIBILITY OF THE NOTETAKING SYSTEM. HEARING STUDENTS IN GENERAL WERE WILLING TO VOLUNTEER AS NOTETAKERS FOR THE DEAF, AND MOST DEAF STUDENTS EXPRESSED SOME SATISFACTION WITH THE SYSTEM. THE STUDY PRODUCED WORKABLE GUIDELINES ON NOTETAKING FOR THE DEAF STUDENT, HIS INSTRUCTOR, AND THE HEARING NOTETAKER. (JB)

ED- EJ012184

CH- EC500806

AU- SPARKS, HOWARD L.; DAVIS, SUE M.

TI- ADMINISTRATIVE PRACTICES IN JUNIOR AND SENIOR HIGH SCHOOL PROGRAMS FOR THE EDUCABLE MENTALLY RETARDED

PD- 69 OCT

IS- CIJE70

SO- EDUC TRAINING MENT RETARDED; 4; 3; 119-22

DE- *ADMINISTRATIVE POLICY; EDUCABLE MENTALLY HANDICAPPED

DE- *EXCEPTIONAL CHILD EDUCATION; GRADUATION; *MENTALLY HANDICAPPED

DE- REGULAR CLASS PLACEMENT; SECONDARY GRADES; SPECIAL CLASSES

DE- SPECIAL SCHOOLS; WORK STUDY PROGRAMS

ED- EJ006285

CH- EC500335

AU- RANDLE, WILLIAM E.

TI- A JUNIOR HIGH PROGRAM FOR HEARING IMPAIRED PUPILS

PD- 69 MAY

IS- CIJE69

SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

SO- VOLTA REV; 71; 5; 279-83

DE- *AURALLY HANDICAPPED; *EXCEPTIONAL CHILD EDUCATION

DE- INDIVIDUAL INSTRUCTION; JUNIOR HIGH SCHOOL STUDENTS; LIPREADING

DE- PARENT PARTICIPATION; REGULAR CLASS PLACEMENT; *SPECIAL PROGRAMS

DE- STUDENT VOLUNTEERS; TEACHING METHODS

ED- EJ002558

CH- EC500166

AU- RUCKER, CHAUNCEY N.; AND OTHERS

TI- THE PARTICIPATION OF RETARDED CHILDREN IN JUNIOR HIGH ACADEMIC AND
NONACADEMIC REGULAR CLASSES.

PD- 69 APR

IS- CIJE69

SO- EXCEPT CHILDREN; 35; 8; 617-23

DE- EDUCABLE MENTALLY HANDICAPPED; *EXCEPTIONAL CHILD RESEARCH

DE- GROUP STATUS; JUNIOR HIGH SCHOOL STUDENTS; *MENTALLY HANDICAPPED

DE- *PEER ACCEPTANCE; REGULAR CLASS PLACEMENT; SELF CONCEPT

DE- SOCIOMETRIC TECHNIQUES; STUDENT ATTITUDES

ED- ED027680

CH- EC003740

AU- MILLER, ROZELLE J.; AND OTHERS

TI- EDUCATIONAL PROGRAMMING IN SIMULATED ENVIRONMENTS FOR SERIOUSLY
EMOTIONALLY HANDICAPPED JUNIOR HIGH SCHOOL STUDENTS. FINAL REPORT.

PD- SEP 68

IS- RIE69AUG

IN- MARYLAND STATE DEPT. OF EDUCATION, BALTIMORE.

SN- OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.

PR- EDRS PRICE MF-\$0.65 HC-\$3.29

CG- OEG-0-8-070985-1794

BN- BR-7-0985

NO- 80P.

DE- ACADEMIC ACHIEVEMENT; BEHAVIOR CHANGE; BEHAVIOR PROBLEMS

DE- BEHAVIOR RATING SCALES; *EMOTIONALLY DISTURBED

DE- *EXCEPTIONAL CHILD RESEARCH; GROUP ACTIVITIES

DE- INTERPERSONAL COMPETENCE; JUNIOR HIGH SCHOOL STUDENTS

DE- REGULAR CLASS PLACEMENT; RESOURCE TEACHERS; ROLE PLAYING

DE- SEX DIFFERENCES; SIMULATED ENVIRONMENT; SIMULATION; SOCIAL STUDIES

DE- STAFF ROLE; TEACHER EDUCATION; TEACHER ROLE; *TEACHING METHODS

AB- A CONTINUATION OF A 3-YEAR ELEMENTARY SCHOOL STUDY INVESTIGATED THE EFFECTIVENESS OF THE VARIOUS SCHEDULES OF A SIMULATED ENVIRONMENTS TECHNIQUE ON EMOTIONALLY HANDICAPPED JUNIOR HIGH SCHOOL ADOLESCENTS. THE 58 SUBJECTS, WHOSE ORIGINAL EVALUATION HAD SHOWN NO EVIDENCE OF NEUROPHYSIOLOGICAL DYSFUNCTION OR SUBNORMAL INTELLIGENCE, WERE RANDOMLY ASSIGNED TO FOUR SCHEDULES IN REGULAR CLASSROOMS FOR EXPERIMENTAL AND CONVENTIONAL TREATMENT. THE SIMULATED ENVIRONMENTS TECHNIQUE CONSISTED OF TEACHING STRATEGIES AND PROCEDURES WHICH REVOLVED AROUND ROLE PLAYING AND WAS IMPLEMENTED IN THE UNIT FRAMEWORK OF THE SOCIAL STUDIES. SIGNIFICANT DIFFERENCES WERE FOUND IN BEHAVIOR IMPROVEMENT AND IN INTERPERSONAL RELATIONSHIPS, PERSONAL EFFECTIVENESS IN A SOCIAL SITUATION, AND PROBLEM SOLVING FAVORING THE LONG-TERM TREATMENT (P .001). NO SIGNIFICANT DIFFERENCES WERE FOUND IN ACADEMIC ACHIEVEMENT. SUBJECTS WITH BEHAVIOR PATTERNS SUCH AS HYPERACTIVITY, PERSEVERATION, AND A SLOWER RATE OF LEARNING NEEDED A LONGER PERIOD OF PLACEMENT IN A SPECIAL CLASS OR RESOURCE ROOM. CONCLUSIONS WERE THAT A DIFFERENTIAL PROGRAM DESIGN MIGHT

SEARCH NO. 1046 REGULAR CLASS PLACEMENT IN SECONDARY SCHOOLS

PROVIDE A BETTER LEARNING SITUATION FOR EMOTIONALLY HANDICAPPED STUDENTS WHO EXHIBIT CHARACTERISTICS OF THE MINIMALLY BRAIN DAMAGED, AND THAT A CONTINUUM OF SERVICES SUCH AS SPECIAL CLASSES, RESOURCE ROOMS, AND SPECIAL PLACEMENT IN THE REGULAR CLASS SHOULD BE PROVIDED. (AUTHOR/RP)

ED- ED014184

CH- EC000930

AU- BUTEFISH, BILL; MATTSON, BRUCE

TI- WHAT THE RESEARCH SAYS ABOUT TEACHING THE EDUCABLE MENTALLY RETARDED IN THE REGULAR CLASSROOM.

PD- JUL65

IS- CUMREPT

IN- WEST TEXAS SCHOOL STUDY COUNCIL, LUBBOCK.

PR- EDRS PRICE MF-\$0.65 HC-\$3.29

VO- 73P.

DE- ADOLESCENTS; CHILDREN; *EDUCABLE MENTALLY HANDICAPPED

DE- EDUCATIONAL OBJECTIVES; EDUCATIONAL RESEARCH; ELEMENTARY EDUCATION

DE- FEDERAL AID; IDENTIFICATION; *REGULAR CLASS PLACEMENT

DE- SECNDARY EDUCATION; SPECIAL EDUCATION; STUDENT EVALUATION

DE- *TEACHING GUIDES; TEACHING TECHNIQUES

ID- LUBBOCK

AB- THIS STUDY OF THE LITERATURE HAS AS ITS MAIN PURPOSE THE PUBLICATION OF A FUNCTIONAL TEACHING GUIDE FOR TEACHERS WITH EDUCABLE MENTALLY HANDICAPPED (EMH) STUDENTS IN REGULAR CLASSROOMS. THE GUIDE IS ORGANIZED AROUND A SERIES OF QUESTIONS--(1) WHO ARE THE EDUCABLE MENTALLY HANDICAPPED, (2) HOW CAN THEY BE IDENTIFIED AND EDUCATIONAL OBJECTIVES FORMULATED, (3) IN WHAT GENERAL WAYS CAN THE REGULAR CLASSROOM TEACHER HELP THEM, (4) WHAT ARE GENERAL AND SPECIFIC TEACHING TECHNIQUES, (5) HOW CAN PROGRESS BE EVALUATED, AND (6) WHAT FEDERAL AIDS ARE AVAILABLE. A NUMBER OF CHARACTERISTICS ARE DESCRIBED, AND TECHNIQUES AND PROCEDURES WHICH HAVE PROVED USEFUL IN TEACHING EMH CHILDREN ARE PRESENTED. A BIBLIOGRAPHY OF 45 ITEMS IS INCLUDED. (DF)

*****END OF OFFLINE PRINTOUT*****

NATIONAL ED.D. PROGRAM FOR EDUCATIONAL LEADERS

PRACTICUM PROPOSAL CHECK SHEET (Attach to practicum proposal)

Mini _____ Name (See attached Practicum Proposal Check Sheet)
Midi _____
Maxi I X Cluster Austin Date of submission 9-18-74
Maxi II _____ An Approach to Meeting the Educational Needs of
Practicum title Secondary Special Education Students

What participant hopes to accomplish Develop a plan to meet the needs of certain special education and regular students in secondary schools for state-wide consideration.

1. PERSONAL DATA

Position in school system (See attached Practicum Proposal Check Sheet)
Does proposal explain how participant's position is related to ability to perform the practicum? Yes

2. IDENTIFICATION OF THE PROBLEM

Does the proposal:

- (a) represent a real problem the participant is anxious to solve? Yes
- (b) make clear what needs to be changed or resolved? Yes
- (c) make clear the importance of doing so? Yes
- (d) justify the time and effort the participant plans to expend? Yes

3. WORK PLAN

Does the proposal:

- (a) distinguish between research and practicum performance? Yes
- (b) take into account similar work in process or completed elsewhere? Yes
- (c) include criteria for evaluating results? Yes

4. EXECUTION

Where will the practicum be carried out? (See attached Check Sheet)

Are needed facilities or other means available? Yes

Have necessary approvals been obtained? Yes

Can practicum be carried out in allotted time? Yes

Estimated total man-days:

- (a) to complete practicum 573
- (b) to write report 20

Schedule:

- (a) start 7/26/74
- (b) end 4/28/75
- (c) report 6/28/75

5. JOINT PRACTICUMS

Has role of each participant been described and justified? Yes

Have man-days for each task-force member been estimated? Yes

6. MAXI PRACTICUMS

Has participant submitted name, title, affiliation, address, and telephone number of each of three persons qualified to observe the practicum critically and willing to evaluate the participant's effort? Yes (See attached Practicum Proposal Check Sheet)

PRACTICUM PROPOSAL CHECK SHEET

Maxi I Participants Charles H. Broughton, Leonard F. Duckworth, Galen Elolf,
Larry Zaruba, and Preston C. Stephens

1. PERSONAL DATA - Position in school system

Charles H. Broughton, Assistant Superintendent
Schertz-Cibolo-Universal City Independent School District
1060 Aero Avenue
Schertz, Texas 78154

Leonard F. Duckworth, Director of Business Services
East Central Independent School District
Route 6, Box 283
San Antonio, Texas 78220

Galen Elolf, Assistant Superintendent
Judson Independent School District
Box 66
Converse, Texas 78109

Preston C. Stephens, Director of Student Resources
North East Independent School District
10333 Broadway
San Antonio, Texas 78286

Larry Zaruba, Administrative Assistant
Fort Bend Independent School District
Box 190
Richmond, Texas 77469

4. EXECUTION - Where will the practicum be carried out?

This practicum will have a research element in the following school districts.
These districts are all located in the State of Texas.

Schertz-Cibolo-Universal City Independent School District
East Central Independent School District
Fort Bend Independent School District
Judson Independent School District
North East Independent School District

6. MAXI PRACTICUMS - Name, title, affiliation, address, and telephone number of three persons qualified to observe the practicum critically and willing to evaluate the participant's efforts:

Dr. Jack Himes, Director of Evaluation
Education Service Center, Region XX
1550 N.E. Loop 410
San Antonio, Texas 78209
(512) 828-3551

PRACTICUM PROPOSAL CHECK SHEET

6. MAXI PRACTICUMS - Continued

Anthony B. Constanzo, Assistant Superintendent
North East Independent School District
10333 Broadway
San Antonio, Texas 78286
(512) 655-4210

Robert Woods, Director of Secondary Education
North East Independent School District
10333 Broadway
San Antonio, Texas 78286
(512) 655-4210

AN APPROACH TO MEETING THE EDUCATIONAL NEEDS OF
SECONDARY SPECIAL EDUCATION STUDENTS

by Charles H. Broughton

Leonard F. Duckworth

Galen Elolf

Preston C. Stephens

Larry Zaruba

Submitted in partial fulfillment of the requirements for
the degree of Doctor of Education, Nova University

Austin Cluster
Dr. Thomas H. Scannicchio, Coordinator

Maxi Practicum Proposal
September 18, 1974

AN APPROACH TO MEETING THE EDUCATIONAL NEEDS OF SECONDARY SPECIAL EDUCATION STUDENTS

IDENTIFYING THE PROBLEM

Special Education programs throughout the nation have been historically geared to meet the needs of elementary age students. The training programs in colleges have focused on this population. The number of teachers and other personnel have been concentrated at the sixth grade level and below.

This ignoring of the secondary population of students with problems is both a philosophical and practical problem--philosophical because many authorities believe that you can treat problems at an earlier age and remediate the situation before the student gets older; practical because the bulk of the secondary special education programs have been developed on a staffing ratio of one teacher to approximately ten or twelve students. This staffing ratio is not acceptable to the majority of secondary administrators who are accustomed to much higher ratios for regular secondary classes.

Secondary administrators for the most part are not well informed regarding special education students or possibilities for creating workable solutions in order to meet the needs of the students in this population assigned to their campus. This lack of information

has added to the retardation of growth of ~~programs~~ for handicapped students at the secondary level.

The problem is particularly noticeable in the areas of students with language and/or learning disabilities (L/LD), minimally brain injured (MBI), and emotionally disturbed (ED). To some degree, answers have been found at the secondary level for the mentally retarded, orthopedic, visually impaired, and other categories of handicapped children. Therefore, this practicum will limit itself to L/LD, ED, and MBI students. There will be some discussion of the other special education categories. The learning disabled, minimally brain injured, and the emotionally disturbed are receiving little attention at the secondary level. This is a nationwide problem, and one of major concern in the State of Texas.

CONCEPTUALIZING A SOLUTION

What is needed is a workable plan which could be easily modified to fit into the master schedule of most secondary schools in Texas. This plan would address itself to the pupil-teacher ratio, which is so often criticized when secondary special education programs for the learning disabled, minimally brain injured, and emotionally disturbed are proposed.

North East Independent School District in San Antonio, Texas, has a program known as the learning lab program which attempts to meet both the practical and philosophical objections as stated on page one. The learning lab program is unique in that it not only appears to meet the needs of special education students at the secondary level, but it goes a long way in meeting the needs of slow learners, students behind academically, and students with discipline problems.

The learning labs are basically an organizational plan and not a methods plan. As organized in North East Independent School District, these learning labs appear to be within the state approved staffing patterns for both special education and regular personnel. This means the learning labs do not require additional personnel over that already available to districts.

While the learning labs are exciting and interesting to the personnel familiar with them, the authors are not aware of previous research establishing the effectiveness of this concept. What must be answered is the question of learning lab effectiveness. Before proposing the learning lab concept as a model program for secondary schools, the labs must first be evaluated. If the labs prove to be educationally sound, based on solid research, the impact of this proposal can be meaningful to secondary education in Texas. A

solution to meeting the educational needs of the secondary special education students can then be presented for consideration.

The learning labs as developed in one district must be capable of being transported to other districts. Their ability to be copied in other situations is as important a consideration as the effectiveness of the original labs.

The final goal of this practicum will be twofold. One objective will be to publish a document outlining the procedure for establishing a learning lab on any secondary campus. This document will contain the philosophy, examples of master schedules, staffing patterns, rules and regulations, and other appropriate and significant data. The second and most important objective will be the acceptance of this concept by other school districts. The acceptability of this concept will be considered significant if the learning lab program is implemented in other school districts.

DEVELOPING A PRACTICUM DESIGN

Hundreds of hours on the part of several dozen employees of the cooperating school districts will be required to complete this practicum. Numerous overlapping activities will be conducted. For the purpose of this proposal only, the participants listed on the

cover sheet will be identified by name. All others involved will be identified by the title of their position or referred to as other staff.

Phase I

Mr. Broughton of the Schertz-Cibolo-Universal City Independent School District will be primarily responsible for investigating secondary programs in Texas to see if programs similar to the learning lab program are in existence elsewhere in the state. Mr. Zaruba of Fort Bend Independent School District will survey Texas secondary schools to see what the usual approach is to meeting secondary special education needs. Mr. Duckworth of the East Central Independent School District will research the literature for the nation as a whole. Mr. Elolf of the Judson Independent School District will design the basic format of the research design. Mr. Stephens of the North East Independent School District will coordinate the research aspect of the project. All of the participants named above will be responsible for the following:

1. Providing demographic data from the school district they represent to be included in the final report.
2. Arranging the pre- and post-testing schedules for the selected students in their district.

3. Securing the administrative approval for cooperating in the research aspect of the study.
4. Supervising the data gathering in their district as the project develops.
5. Securing the necessary funds from the respective district budgets to pay for testing materials and scoring, the computer time required, and the clerical and professional assistance needed in both the research aspect and the development of the document for the consideration of other school districts in Texas.

It is expected that the five individuals named will meet bi-monthly during the 1974-75 school year to monitor the project and to decide on adjustments as needed.

All high school and middle school/junior high school learning lab teachers will be expected to cooperate fully with the pre- and post-testing. The principals and assistant principals will be called upon to provide other data as requested.

The evaluation phases have been partially developed. Through a series of joint meetings, it was agreed that the present learning labs in operation in the North East Independent School District of San Antonio would be evaluated. This evaluation will be two-sided. The cognitive areas of math and reading will be pre- and post-tested

through random sampling techniques of a representative number of the special education and regular students being served in the learning labs. These students will be matched by computer selection with students meeting the criteria from the other non-North East school districts represented by the participants in this practicum. The selected students will be given the same pre- and post-testing to measure cognitive growth. The results will be computer compared, and the difference will be established.

The same procedure will be used to ascertain the differences in measurable affective areas. The major difference between these two measurements is that the school-based personnel responsible for the students in the target population (North East Independent School District learning lab students) and the control students (from Judson Independent School District, Fort Bend Independent School District, East Central Independent School District, and Schertz-Cibolo-Universal City Independent School District) will not be told in advance what areas of affective behavior will be matched.

All affective areas to be matched will involve measurable behavior from retrievable information. The areas to be matched include: attendance-expressed in percent of days in membership; suspensions-expressed in numbers of times and days involved; referrals to principal or assistant principal for discipline; and drop out rates.

The hypotheses on which this data will be applied have been developed. The practicum report will detail all of these hypotheses and give the results of the differences between the target and the control students.

Arrangements have been made with the San Antonio Education Service Center to provide computer assistance where it is needed. It is anticipated that this computer assistance will be used in the evaluation phase and the unit comparison phase.

The unit comparison phase is a coined phase to apply to the practical argument against secondary programs for the special education students in the L/LD, ED, and MBI groups. It is our contention, after studying the organization of the present learning labs of North East Independent School District, that they are staffed within the framework of the statewide foundation school program. If this is the case, it means that school districts, regardless of wealth, can staff a learning lab by full utilization of the personnel and material allocations of the state's formulas of regular teachers and special education teachers.

To prove this, representative master schedules will be provided from each school district cooperating in the project. They will be revised to include a learning lab on each secondary campus by the use of computer assistance. These revised schedules will be matched

against the statewide formulas applicable to those districts in order to see if the contention is true.

Phase II

Another phase of this practicum is to field test the exportability of the learning lab concept. Therefore, a learning lab based on the North East Independent School District model will be field tested during the 1974-75 school year at Samuel Clemens High School in the Schertz-Cibolo-Universal City Independent School District. This phase will give a good picture of the ability of another school district to adapt the concept to their situation. The students in this field test at Samuel Clemens High School will be considered part of the target group and not the control group for evaluation purposes.

Phase III

If the learning labs are proved effective through this controlled study and field test, the next phase of the practicum will be needed. This phase involves writing a document explaining how to organize, staff, and sell the learning lab concept to a faculty. Because of the time limitation, this document will be written regardless of the outcome of the cognitive and affective testing. It will be included as a part of the final report.

Phase IV

The final phase will be to export the learning lab concept to districts using some other approach. This phase may prove to be the most difficult to accomplish, and yet the easiest to evaluate.

ASCERTAINING THE REQUIRED INPUTS

As previously explained, the similarity of other programs to the learning lab concept will be reviewed. Also, the organizational plan of meeting secondary special education needs will be reviewed statewide in Texas. This literature and survey review is in progress and will be a part of the practicum report.

The evaluation of the North East Independent School District learning lab concept and the field test in the Schertz-Cibolo-Universal City Independent School District will be documented in the practicum report. It is expected that all of the staff in target labs plus the necessary staff in the control schools will cooperate to provide the data. The field test portion of the practicum is now in operation in the Schertz-Cibolo-Universal City Independent School District. The results of this experience will be provided in the final report.

The document phase is not yet ready to begin. It will occur during the spring of 1975 and be completed in time for inclusion

in the final report. The phase of getting the learning lab concept accepted in school districts other than North East and Schertz-Cibolo-Universal City will occur in late spring or early summer.

All of these activities are time consuming. All of these phases have varying degrees of difficulty depending on what transpires during the course of the year. An actual detailing of the effort which will be expended would not necessarily be adequate. To add even more uncertainty to the project, the Special Education Division of the Texas Education Agency is considering funding part of the evaluation and dissemination portion of the practicum.

The following detailed budget will assume no extra assistance from state or federal funds. For clarity the budget breakdown will be by phases and will list participants separately from other staff personnel wherever possible. To further reduce the unbalanced picture of the requirements of the Maxi Practicum from the practicum to be accomplished, the budget will eliminate all practicum proposal planning and writing time. The practicum report writing time will not be eliminated since it is yet to be accomplished and is interwoven into several phases of the project. The budgets are shown as Part A: Time, and Part B: Money.

PART A: Time

Phase I - Evaluation of the existing North East model

A. Designing research phase

- | | |
|---|----------------|
| 1. All participants (5 @ 4 hrs.) | 20 hrs. |
| 2. Mr. Elolf + arrange for computer input, etc. | <u>25 hrs.</u> |
| Total | <u>45 hrs.</u> |

B. Selection and ordering of pre- and post-test instruments

- | | |
|--|----------------|
| 1. All participants (5 @ 2 hrs.) | 10 hrs. |
| 2. Mr. Stephens | 8 hrs. |
| 3. Other staff (North East) 6 @ 2 hrs. | 12 hrs. |
| 4. Secretarial | <u>1 hr.</u> |
| Total | <u>31 hrs.</u> |

C. Survey and research of current practices

- | | |
|--|----------------|
| 1. Participants - strategy session (5 @ 2 hrs.) | 10 hrs. |
| 2. Mr. Broughton - survey for similarity | 25 hrs. |
| 3. Mr. Duckworth - Eric search and other library search for similarity | 20 hrs. |
| 4. Mr. Zaruba - survey of Texas schools | 20 hrs. |
| 5. Secretarial - typing surveys, mailing, etc. | <u>15 hrs.</u> |
| Total | <u>90 hrs.</u> |

D. Administration of Pre- and Post-Test Instruments

- | | |
|--|---------|
| 1. Mr. Stephens - Explanation to ten secondary schools, making test arrangements, etc. | 30 hrs. |
| 2. Making arrangements in control schools | |
| a. Mr. Broughton (one target school) | 15 hrs. |

b. Mr. Duckworth	7 hrs.
c. Mr. Elolf	7 hrs.
d. Mr. Zaruba	<u>7 hrs.</u>
Total	66 hrs.
E. Affective Testing - same data in all schools (supervision only required of participants)	
1. Participants (5 @ 4 hrs.)	20 hrs.
2. Other staff including school based staff	
a. North East (5 target schools)	50 hrs.
b. Judson (2 control schools)	10 hrs.
c. East Central (2 control schools)	10 hrs.
d. Fort Bend (2 control schools)	10 hrs.
e. Schertz-Cibolo-Universal City (1 control, 1 target school)	<u>15 hrs.</u>
Total	115 hrs.
F. Data Analysis	
1. Designing and re-designing	
a. Participants (5 @ 4 hrs.)	20 hrs.
b. Mr. Elolf	20 hrs.
2. Computer programming and running	<u>35 hrs.</u>
Total	75 hrs.
G. Analysis of statewide funding formulas	
1. Providing master schedules from all districts concerned	
a. Mr. Stephens (North East 5 target schools)	20 hrs.
b. Other four participants @ 4 hrs.	16 hrs.

2. Applying statewide formulas to each district to test hypothesis
 - a. All participants for planning (5 @ 3 hrs) 15 hrs.
 - b. Mr. Elolf to calculate the staffing patterns against state minimum funding formulas 20 hrs.
 - c. Mr. Duckworth to verify the findings of the computer runs 10 hrs.
 - d. Mr. Zaruba to prepare a preliminary report on this critical aspect 5 hrs.
 - Total 86 hrs.

Phase II - Field Testing Model

- A. Staff selection, re-design of high school master schedule and implementation (performed during summer before practicum officially began) N/A
- B. Re-designing and supervision of model
 1. Mr. Broughton (assistant superintendent where model is being field tested) 15 hrs.
 2. Others including local special education director, principal, and other school based personnel 95 hrs.
 - Total 110 hrs.
- C. Conducting year long field test
 1. Hours of instruction by special education staff (3 x 6 hrs. per day x 180 days) 3240 hrs.
 2. Hours of instruction by regular personnel (2 x 5 hrs. per day x 180 days) 1800 hrs.
 3. Inservice for staff including that received by learning lab personnel and that given by them 125 hrs.
 - Total 5165 hrs.

Phase III - Dissemination

A. Researching and writing history of North East learning labs		
1. Mr. Stephens - supervision and rewrite	20 hrs.	
2. Other staff including each principal and selected lab teachers	100 hrs.	
3. Other participants - review, edit, rewrite	<u>20 hrs.</u>	
Total	140 hrs.	
B. Presenting the organizational plan on paper		
1. Mr. Broughton and Mr. Zaruba	30 hrs.	
2. Other staff including secretarial and reaction groups	<u>25 hrs.</u>	
Total	55 hrs.	
C. Arranging the financial data concerning statewide formulas into understandable form		
1. Mr. Elolf and Mr. Duckworth	30 hrs.	
2. Other staff including secretarial and reaction groups of principals, superintendents, and special education directors	<u>25 hrs.</u>	
Total	55 hrs.	
D. Publishing the dissemination document		
1. Writing and editing - all participants	45 hrs.	
2. Secretarial time	20 hrs.	
3. Printing staff	<u>15 hrs.</u>	
Total	80 hrs.	

Phase IV - Exploring the learning lab models

A. Dissemination of document	3 hrs.
B. Conducting inservice on concept (including travel time). This could be extremely low depending upon the success of the research and the field test model.	30 hrs.
C. Presenting concepts to neighboring administrators and/or boards	<u>20 hrs.</u>
Total	53 hrs.

Grand Total 6166 hrs. or

Total Days 770

Post Practicum Phase - Writing the Report

A. Reviewing the parts and agreeing on format (all participants)	15 hrs.
B. Putting technical data in final form (Mr. Zaruba and Mr. Elolf)	45 hrs.
C. Rough draft (Mr. Stephens and Mr. Duckworth)	60 hrs.
D. Editing and rewrite (Mr. Broughton)	<u>40 hrs.</u>
Total	160 hrs. or
Total Days	20

PART B: Money*

Phase I - Evaluation of Existing Model(s)

A. Test Materials

1. Pre- and post-tests

a. Booklets	\$ 148.00**
b. Answer sheets	500.00
c. Scoring	2,150.00
d. Postage	40.00

2. Travel and miscellaneous 50.00

B. Computer Time 215.00

C. Programmer and Secretarial Help 440.00

D. Survey Materials - Postage 125.00

Phase II - Field Testing Model (no expenses anticipated)

Phase III - Dissemination

A. Historical review of existing learning labs - educational writer	2,000.00
B. Data analysis - all areas	1,500.00
C. Educational writer for review and suggestions	1,500.00
D. Document format and final form unknown, therefore amount based on xerox copies @ 4¢ for 20 pages - 200 documents	160.00
E. Postage and miscellaneous	100.00
F. Slide presentation or video tape outside of participants budget limitations unless extra state or federal funding is provided.	

*Does not include salaries of staff unless employed for project.

**All funds shown are budgeted items - requisitions and check stubs can be provided if needed.

Phase IV - Exporting the Learning Lab Model(s) - No expenses anticipated

Other Items - Part of the total practicum but not applicable for any one phase

A. Secretarial time paid personally by participants	\$ 200.00
B. Outside reviewers of research design and project (if needed - funds available)	<u>900.00</u>
Total	\$ 10,028.00

EXECUTING THE PRACTICUM

The project will be conducted in the following counties in Texas: Bexar, Guadalupe, and Fort Bend. The participants are all members of the Austin cluster.

Planning for this practicum began in November of 1973. The final plans to implement it were developed in the spring of 1974. The members of this practicum team decided to wait until the Summer Institute in Miami, Florida, was completed before proceeding with the practicum proposal. Since each participant has a major role to fill in his respective school district, the group was unable to complete the final draft of the practicum proposal until September 1974.

At this writing, Phases I and II are well under way. Phases III

and IV will be conducted approximately the same time as the end of Phase I is completed.

Arrangements have been made to reserve a centrally located conference room for the use of the participants throughout the year. The first four meetings of the participants have been scheduled. It is understood that the distance involved for one participant will necessitate some long distance calls and use of the mail.

The practicum report should be ready for presentation for the deadline set in the check sheet. If difficulty is encountered, a terse memo will be sent explaining the delay.

EVALUATING THE RESULTS OF THE PRACTICUM

This practicum is a self-evaluation project but not in the usual sense of the term. In all three phases the evaluation is built into the project as an integral part.

Phase I is a research and evaluation phase. For evaluation purposes of the practicum report these two areas can be easily measured:

- A. The successful search of literature and survey to be reported in the report.
- B. The analysis of the data supporting or rejecting the hypothesis already formulated.

Phase II is already partially successful by any criteria. Because of the time restraints of the practicum, the arrangements to field test the model had to be completed last spring. Samuel Clemens High School opened in late August for the 1974-75 school year with a fully staffed and operating learning lab. Its survival until the spring of 1975 will make the contention of the exportability of the concept more plausible.

Phase III is interwoven with the data concerning the learning lab evaluation. However, if the students in the target group fail to show significant differences over the students in the control group, it does not necessarily mean the end of the learning lab concept. The dissemination phase would still be completed but in a manner very different from our present intent.

Perhaps the dissemination phase would focus on the organizational possibilities only, or even the need to be more concerned with methodology. In any event, this phase also is easily measured. A document, easy to understand, must be prepared. This document may be a mimeograph handout, a printed pamphlet, a published book, or none of these. Whatever form it takes, this document should clearly outline to the reader what the learning lab concept is all about. It should give easy to follow directions for implementing the program in most other districts in Texas.

Phase IV may prove to be the hardest phase to implement. Can and will districts copy a concept developed for secondary special education students regardless of its proven record? The answer to that question may be partially answered by this practicum. The evaluation part of Phase IV remains very easy to demonstrate. Proof of the intent of a Texas district other than North East or Schertz-Cibolo-Universal City to implement the learning lab concept for the 1975-76 school year should be sufficient to demonstrate its success. This proof should take the form of a letter from an appropriate school official, the minutes of a local school board's authorization, or publication of a news item in the local paper stating the intent to organize a learning lab.

An attempt will be made to secure state or federal funds to assist with the dissemination phase. At the present time there are no unallocated funds available. Therefore, the failure to secure funds will not be considered a negative evaluation. If funds are obtained in excess of ten thousand dollars, the practicum will be viewed by the participants as very successful regardless of the evaluation parts of the other phases.

APPENDIX VII

INTERIM REPORT

AN APPROACH TO MEETING THE EDUCATIONAL NEEDS
OF
SECONDARY SPECIAL EDUCATION STUDENTS

By

Charles H. Broughton
Leonard F. Duckworth
Galen Eloff
Preston C. Stephens
Larry Zaruba

Austin Cluster
Dr. Thomas H. Scannicchio, Coordinator

Maxi Practicum
May 1975

Interim Report

This interim report is being presented to give the Nova reviewer of this practicum an update on the procedures and time frame being followed by the participants in this practicum. This report will also point out the slight variances in the actual implementation of the practicum from the proposal originally presented. These changes are slight but need to be indicated at this time to avoid confusion when the final report is presented.

In Phase I we proposed to survey current practices in Texas as a whole to ascertain what approaches to meeting secondary special education needs were being practiced. This problem was discussed with the Director of Evaluation and Administration of the Special Education Department of Special Education in Texas Education Agency. He reported that the best survey instrument to use was the composite state-wide Special Education Superintendent's Report. This report, of some fourteen pages, filed annually by each of the superintendents in the State is the most accurate picture of deployment of staff available since each report is a notarized auditable document. We took his advice and accepted his assistance. His office provided us with a composite special education report for the 1973-74 school year in Texas containing all of the facts and figures regarding uses of special education personnel and their deployment. This report is much more accurate than any survey we could conduct. The survey information used in the final report will come from this composite report.

In Phase I we also proposed to research the literature to determine national efforts in this regard. This has been accomplished.

The major effort of Phase I was a research design to match control and target students randomly selected in five school districts. After careful consideration this procedure was modified to a more exact research design. Thus the target (experimental) students in the Learning Lab Program in North East Independent School District were matched exactly on a one-to-one basis with students in four other districts. The only random sample device left in the study was to select the North East schools so that only half of the schools were included in the study. This cut in half the number of students which had to be matched in other districts. The procedure still left a population of nearly 1,000 students to be studied in depth.

However, all the students in the Learning Labs of the target district (North East) were administered the pre and post testing thus establishing a study with several dimensions beyond that originally envisioned. This procedure raised the cost estimates beyond that proposed but the benefits from the additional data will provide more depth and meaning to the study as a whole.

All of the pre and post cognitive testing in math and reading has been completed on approximately 3,000 students involved in this research design. The groups are 900 regular and special education receiving instruction through the Learning Lab Concept in the two high schools and three middle schools in North East Independent School District that

were randomly selected as target schools to be the experimental schools. The 550 students matched exactly on a one-for-one basis in four school districts without learning lab arrangements. This second group serves as a control group with the students being matched with the target students on the basis of I.Q., age, sex, grade, and classification (regular or selected type of special education placement). The third group is approximately 1100 students in North East Independent School District secondary schools receiving learning lab instruction where no attempt has been made to match the students on a one-to-one basis with like students in other districts. The results on these students will be compared to the original target group to ascertain the differences, if any. The fourth group of students are in the Samuel Clemens High School Learning Lab which is serving as the transported model of this concept. This group of students are receiving the treatment of a Learning Lab through the staffing and funding pattern provided in a district outside of North East Independent School District where the concept was originally developed. A full explanation as well as the results of the testing will be contained in the final report of this practicum.

The pre and post testing in the cognitive area has proceeded along the time frame originally proposed. There is an unanticipated slowness on the part of the scoring section of the test publisher which may delay the final computer analysis of the data by about two weeks. However, the final report should be ready near the end of June, 1975, as proposed.

The affective data has all been collected. There was a necessity to add one item of measurable behavior to the four originally proposed. A committee of principals and assistant principals felt that expulsions should be added to the list of attendance, suspensions, referrals for discipline, and drop-outs because of legal considerations. Under Texas law a student removed from school for the rest of the year is an expulsion and not a suspension. Their recommendation was accepted and the affective data gathering form was amended accordingly. This committee also assisted in the development of exact statements on these five items so that each of the five districts would use the same criteria to gather this retrieval data.

The hypothesis have been developed with the assistance of three different Ph.D. level persons each of whom received their training in special education and their degrees from separate universities. These hypothesis are revised versions of those originally developed by the practicum participants to make the research of the study more valid and to accommodate the computer design. The only difference between the originally designed hypothesis and the ones finally applied, are in the wording and the number of hypothesis.

The analysis of staff available under legislation and State Board of Education staffing patterns have been completed without the necessity of computer assistance. This information will be used to justify the conclusion that the Learning Labs are staffable under existing financial authorizations.

Phase II of the field testing is complete. The gains of student enrolled in the Learning Lab Project of Samuel Clemens High School will be matched against the average gains found in the North East target schools. The research phase is not completed but the data has been gathered. However, the establishment of a Learning Lab in a secondary school outside of North East is proof of the transportability of the Learning Lab Concept.

Phase III is the writing of a document which will encourage other secondary schools in the State to adopt the Learning Lab Concept. This document has the interest of the Special Education Department of the Texas Education Agency even though they have been unable to authorize any State funds to the dissemination as yet. Parts of the document have been written and all that remains is the inclusion of some additional information plus the results of the research data. This document will be presented in the final report as an appendix.

Phase IV continues to be the most difficult phase to accomplish. The evaluation of this phase requires that districts other than North East and Schertz-Cibolo/Universal City agree to implement the Learning Lab Concept. To date the target schools have had many visitors from several districts but no hard data concerning the intent of other districts has been provided. This is due mainly to the unrest in Texas education as a result of the legislative study of educational funding now being conducted. The Texas Legislature meets once every two years. They have been in session since January, 1975, and are scheduled to

continue until June 2 of that year. There have been four major educational financing bills introduced. Each of these bills have a major impact on changing the ways by which school districts receive staff. At present, the Governor of the State has a radically different bill which is strongly supported in the Texas Senate. The Texas State Teachers Association has a status-quo bill containing many improvements which has the backing of a majority of the Texas House of Representatives. In addition, major amounts of funds for special education services have been cut off the appropriations bill on the House side. This uncertainty has led to great reluctance on the part of many school officials to make any decisions regarding the 1975-76 school year. Thus, it will probably be mid-June or later before those districts expressing a desire to implement the Learning Lab Concept put their intention into motion. The amount of interest expressed in this new concept leads us to believe that this phase will be successful despite one of the most confused legislative sessions in Texas history.

APPENDIX VIII

County _____
Name of Independent or Common School District for Which Report is Made State Intake

Telephone No. _____
and Area Code _____
Post Office Address of School District and Zip Code _____
Region _____
County-District # _____

Texas Education Agency

ANNUAL SPECIAL EDUCATION STATISTICAL REPORT

for 19 73 - 74

The Annual Special Education Statistical Report must be received by the Texas Education Agency, Department of Special Education, on or before July 15. Please complete this report in accordance with Instructions contained herein.

NOTE: IN INDEPENDENT DISTRICTS WITH 500 OR MORE SCHOLASTICS, the Superintendent of Schools shall execute this report. In all Common School Districts, and in those INDEPENDENT SCHOOL DISTRICTS WITH FEWER THAN 500 SCHOLASTICS, the local administrative officer in charge shall execute this report and parts of this report shall be audited and approved by the County Superintendent of Education. Final approval for allocation of special education resources is contingent upon the completion and return of this document.

DISTRICTS WHICH DO NOT OFFER ANY FORM OF SPECIAL EDUCATION SERVICES ARE NOT REQUIRED TO COMPLETE THIS REPORT. DISTRICTS WHICH ARE MEMBERS OF PLAN A COOPERATIVES, BUT WHICH ARE NOT THE FISCAL AGENT, ARE ALSO NOT REQUIRED TO COMPLETE THIS REPORT. ALL OTHER DISTRICTS ARE REQUIRED TO COMPLETE ALL APPLICABLE ITEMS IN THIS REPORT.

OATH OF OFFICER MAKING REPORT

This report is true and correct to the best of my knowledge and belief.

Person Executing this Report _____

Telephone Number and Area Code _____

Post Office Address _____

Subscribed and sworn to before me this _____ day of _____, 19____

Notary Public in and for _____

County, Texas

Name of Contact Person _____

Telephone Number and Area Code _____

OATH OF COUNTY SUPERINTENDENT (Required of all independent school districts having fewer than 500 scholastics and ALL Common School Districts).

I have examined or caused to be examined the accuracy of information appearing on this report and it is true and correct to the best of my knowledge and belief.

County Superintendent _____

Subscribed and sworn to before me this _____ day of _____, 19____

Notary Public in and for _____

County, Texas

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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SPECIAL NOTE: Units in Item 1 plus Item 2 are the grand total on which other unit consistency checks are based. All educational level totals are complete and accurate.

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)
	EDUCATIONAL LEVEL	4041	4042	4142	4242	4342	4343	9543	92	4444	4544	4244	4545	4811	4847	4747	4847	4947	5047	5147	5251	5252	TOTAL
3. Indicate by unit assignment and educational level the number of special education teacher units which were authorized on the preliminary application but were not activated due to lack of personnel.	Pre-Elern. (PR)							.5												2.5	2.0	4.0	14.0
	Elementary (EL)			1.5		2.5	1.0			18.0	2.0	3.5	26.3		4.0					18.0	42.0	4.0	132.6
	Secondary (SE)			.5		1.0				9.0	10	.5	4.5	1.0	2.0					28.4	4.0		51.9
	Total (TØ)			2.0		3.5				27.0	3.0	4.0	30.8	1.0	4.0	2.0				58.7	48.0	12.0	199.5
4. Indicate by unit assignment and educational level the number of special education teacher units which were authorized on the preliminary application but were not activated due to lack of classroom space.	Pre-Elern. (PR)																				1.0	1.0	2.0
	Elementary (EL)					1.0															1.0		1.0
	Secondary (SE)									1.0													1.0
	Total (TØ)					1.0				1.0											1.0	1.0	1.0

- plan A's report CTU's in column X (TOTAL) only.

Card	01	03	05	08	11	14	17	20	23	26	28	31	34	37	40	43	46	49	52	55	58	61	64	67	70	73
Columns	02	04	07	10	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	64	67	70	73	
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)		
5. Only Plan A districts complete this item. Indicate by unit assignment and educational level, the number of special education classroom teachers who are certified in special education.	EDUCATIONAL LEVEL	4041	4042	4142	4242	4342	4343	8543	92	4444	4544	4244	4545	4011	4647	4747	4847	4947	5047	5147	5251	5252				
	Pre-Elm. (PRI)	6.0	4.0				1.0	16.7		1.0	6.6	8.0	27.6							41.7	4.0	212.0		388.6		
	Elementary (EL)	25.0	45.5	78.9	12.5	103.7	24.8	1.5	105.0	814.0	289.2	20.0	743.4		90.5		6.0	16.0		1211.8	808.0	6.0		4449.3		
	Secondary (SE)	10.5	18.5	102.9	13.5	50.0	10.5		35.0	503.5	129.0	8.0	85.0	115.2	2.0	53.5	11.0	17.0	2.0	603.1	225.7			1945.9		
	Total (TØ)	41.5	68.0	181.8	26.0	243.2	36.3	18.2	140.0	1318.5	424.8	36.0	856.0	115.2	92.5	53.5	17.0	33.0	2.0	145.0	1051.0	28.0		6875.8		
6. Only Plan B districts complete this item. Indicate by unit assignment and educational level, the number of special education classroom teachers who are certified in special education and are teaching in the area in which they are certified.	EDUCATIONAL LEVEL																									
	Pre-Elm. (PRI)																								43.9	
	Elementary (EL)	4.5	12.0	38.9	3.5	205.0	12.0		7.0	66.5	91.4	16.5	391.8	7.0	37.2	4.0		5.0	1.0	74.1	175.8			1752.0		
	Secondary (SE)	3.0	5.5	50.6	2.5	78.5	1.5		1.0	446.9	190.4	3.0	44.5	54.6	10.7	19.0	5.0	2.0	1.3	61.6	37.2			913.9		
	Total (TØ)	7.5	17.5	89.5	6.0	283.5	13.5	4.0	8.0	1134.5	52.0	19.5	442.7	61.6	48.0	23.0	5.0	12.0	2.3	135.7	213.9	28.0		2709.8		
7. Indicate by unit assignment & by educational level, the number of special education teachers whose highest degree is the bachelor's degree and who are on permits for special assignment.	EDUCATIONAL LEVEL																									
	Pre-Elm. (PRI)																								96.0	
	Elementary (EL)	3.0	3.0	20.2	1.0	79.3	2.0		13.0	162.6	23.3	2.0	43.8	1.0	50.0		3.0	3.0	.4	247.7	271.9	5.0		935.2		
	Secondary (SE)	2.0	2.0	18.6	1.0	37.2	1.0		8.0	84.5	11.7	2.0	7.3	16.2	.5	29.5	2.5	4.0	5.0	151.8	116.4			501.2		
	Total (TØ)	5.0	5.0	38.8	2.0	116.5	3.0		21.0	247.1	36.0	4.0	52.7	17.2	50.5	29.5	5.5	7.0	5.4	409.7	291.5	85.0		1538.4		
8. Indicate by unit assignment & by educational level, the number of special education teachers whose highest degree is the master's degree and who are on permits for special assignment.	EDUCATIONAL LEVEL																									
	Pre-Elm. (PRI)																								14.0	
	Elementary (EL)	1.0		2.2		8.5			2.0	39.0	3.5	.5	7.9		7.0			2.0	.3	41.0	66.7			181.6		
	Secondary (SE)			3.7		12.0			1.0	23.5	2.0		3.6	4.9	.5	9.0	4.5	4.0	.7	43.5	18.3	1.0		131.6		
	Total (TØ)	1.0		5.9		20.5			3.0	62.5	6.5	.5	11.5	4.3	7.5	9.0	4.5	6.0	1.0	84.5	85.0	14.0		327.2		

NOTE: For Plan A districts, items 5 + 7 + 8 should equal items 1 plus 2 in terms of total number of units, educational level, and type of unit.
For Plan B districts, items 6 + 7 + 8 should equal items 1 plus 2.

9. Indicate attendance information on the following chart based on your normal school year (180+ days) for all special education students (except those who receive only speech therapy) during the period they are actually enrolled in special education.

CRO COLUMNS	SPECIAL EDUCATION STUDENTS					SPECIAL EDUCATION STUDENTS			TOTAL	
	05 10 C	05 10 C	11 16 D	17 22 E	23 28 F	11 16 D	17 22 E	23 28 F		
AGGREGATE DAYS MEMBERSHIP (DM)		2,781,539					21,597		538,360	3,341,496
AGGREGATE DAYS ABSENT (DA)		1,070,848					1,059,663		105,689	2,236,200
DAYS TAUGHT (DT)										

AGGREGATE DAYS MEMBERSHIP obtained from Texas Daily Register of Pupil Attendance for School Year 1973-74, p. 27, Line F (posted from Block 1, p. 25)

AGGREGATE DAYS ABSENT also obtained from Daily Register, 1973-74, p. 27, Line G (posted from Block 2, p. 25)

DAYS TAUGHT obtained from Daily Register, p. 27, Line A Total (Enter actual number of days the program was taught)

ELIGIBLE SPECIAL EDUCATION STUDENTS: (excluding those who receive only speech therapy) Special Education students served under Plan A program ages 5 (on or before Sept. 1) through 20 (on Sept. 1) who receive 50% or more of their instruction during the year in the regular classroom.

1973-74 Plan B districts which operated LLD programs that were officially approved as LLD developmental programs in 1972-73 may count as eligible in 1973-74 the same number of LLD students as were eligible in 1972-73, provided that same number of students was served in 1973-74, and received 50% or more of their instruction in the regular classroom. In no case should a Plan B LLD program in 1973-74 report more eligible students than were served in the developmental LLD program in 1972-73.

INELIGIBLE SPECIAL EDUCATION STUDENTS: (excluding those who receive only speech therapy) All Special Education students served in Plan B schools (except those described in the eligible description) are ineligible whether or not they receive 50% or more of their instruction in the regular classroom. Special Education students served by Plan A programs who receive more than 50% of their instruction during the year in the special education classroom are considered ineligible. Those special education students who are age 21 or over, or ages 3 and 4, are ineligible. Do not include contract students under ineligible but rather in the special education contracted students column.

CONTRACTED SPECIAL EDUCATION STUDENTS: (excluding those who receive only speech therapy) who are served on a contract basis with an approved nonpublic school should be reported in this column. This includes those served under Plan A and Plan B programs.

*NOTE: Further information on eligible and ineligible attendance accounting may be obtained from a memorandum sent to administrators dated June 18, 1973 from Leon H. Graham and Robert A. Montgomery with subject stated as: Pupil Eligibility and Attendance Accounting - Plan A.

NOTE: Do not include those students whose only special education service is speech therapy.

Form
Columns 01 02

03 04 05 10 11 16 17 22 23 28 34 35 40 41 46 52 58 64 70

HANDICAPPING CONDITIONS

(A)	(B) EDUCATIONAL LEVEL	(C) VH	(D) OH/OHI	(E) MBI	(F) AH	(G) EMR	(H) TMR	(I) SH	(J) LLD	(K) PS	(L) ED	TOTAL
GRADED	Kindergarten (K1)	27	160	71	109	151		11,981	2082		37	14,618
	Grade 1 (G1)	61	499	615	273	632		22,263	8068		195	32,606
	Grade 2 (G2)	50	441	1073	208	835		16,013	10,270		543	29,203
	Grade 3 (G3)	52	469	1446	190	1081		11,527	10,171		437	35,901
	Grade 4 (G4)	68	441	1577	89	1173		7870	11,060	1	559	22,838
	Grade 5 (G5)	58	437	1430	89	1123		5323	10,051	4	627	19,142
	Grade 6 (G6)	50	656	1203	61	1267		3129	7515	8	646	14,535
	Grade 7 (G7)	49	933	1029	68	1608		1781	5970	12	759	12,265
	Grade 8 (G8)	46	1099	795	61	1352		1142	4634	216	935	10,300
	Grade 9 (G9)	34	1283	511	80	999		554	3441	731	957	8575
	Grade 10 (G10)	29	1036	321	82	708		463	2516	1214	668	7037
	Grade 11 (G11)	32	755	279	43	559		265	1420	1247	408	5038
UNGRADED	Grade 12 (G12)	25	640	205	47	395		191	1092	1386	271	4252
	Ungr. Pre-El. (UP)	110	541	175	319	618	779	873	2924		167	6506
	Ungr. Elem. (UE)	62	625	1615	466		4270	2469	1732		417	11,657
	Ungr. Sec. (US)	7	297	654	182		3624	110	978	92	1342	7287
	EMR Level 1 (E1)					3554						
	EMR Level 2 (E2)					4974						
	EMR Level 3 (E3)					6166						
EMR LEVEL	EMR Level 4 (E4)					4957						
	EMR Level 5 (E5)					3507						
	EMR Level 6 (E6)					2984						
	EMR Level 7 (E7)					3512						

760 10,282 13,004 2367 40955 8673 85,934 84,450 4998 8791 260,214

NOTE: Each special education student should be listed only once in this table.

SPECIAL NOTE: The total number of students listed in each column (handicapping condition) of item 10 should equal the total number of students listed in each column (handicapping condition) in item 11 (e.g. the number of EMR's in item 10 should equal the number of EMR's in item 11). REPORT ALL STUDENTS, INCLUDING ALL STUDENTS CONTRACTED TO APPROVED NON PUBLIC SCHOOLS.

Cards
Columns01
0203
0405
1011
1617
2223
2828
3435
4041
4647
5253
5859
6465
70

HANDICAPPING CONDITIONS

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	AGE	VH	DH/DHI	MBI	AH	EMR	TMR	SH	LLO	PS	ED	TOTAL
11. Indicate by age and by handicapping condition the number of students who received special education services. This should be an unduplicated count of all children who received special education services during the school year. List each student only once in this table. If a student has more than one type of handicapping condition, the student should be reported in the column indicating his primary handicapping condition. NOTE: Students listed in a particular handicapping condition column in item #10 should be listed in the same handicapping condition column in item #11. NOTE: The number of students listed by handicapping condition in item #10 should equal the number of students of the same handicapping condition in item #11. (e.g. Number of TMR's in item #10 should equal the number of TMR's in item #11)	(03)	33	205	47	122	157	219	220	585		33	1621
	(04)	41	240	67	139	269	221	638	1214		63	2892
	(05)	57	271	106	157	336	330	11,979	3125		95	16,456
	(06)	47	405	369	166	985	462	19,400	5841	1	153	27,829
	(07)	39	475	814	180	1792	604	16,461	8896		303	29,564
	(08)	60	454	1330	394	2569	648	12,328	9609		409	27,801
	(09)	69	516	1665	196	3301	646	8877	10,168		592	26,030
	(10)	67	496	185	151	3744	624	5969	10,227	3	617	23,753
	(11)	58	566	167	145	3951	679	3916	8293	1	640	19,925
	(12)	52	741	1452	131	3938	633	2451	6937	29	623	16,987
	(13)	55	972	1109	136	4232	726	1477	5938	126	832	15,603
	(14)	42	1238	860	177	4098	662	929	4555	460	1017	14,028
	(15)	46	1389	625	102	3595	606	545	3611	960	1135	12,614
	(16)	37	1244	430	62	3012	512	409	2556	1463	697	10,482
	(17)	27	712	340	58	2357	374	267	1591	1419	436	7581
	(18)	18	226	191	37	1370	309	105	828	444	184	3712
	(19)	7	73	49	18	460	188	29	288	79	138	1329
	(20)	3	35	9	9	178	175	9	73	20	118	629
	(21)	1	9	3	2	510	54		12	1	703	1295
	(T0)	759	19267	12997	2382	40914	8672	86,009	84347	5006	8788	260,141
TOTAL												

NOTE: REPORT ALL STUDENTS, INCLUDING ALL STUDENTS CONTRACTED TO APPROVED NON-PUBLIC SCHOOLS

NUMBERS IN THIS ITEM SHOULD EQUAL AND BE CONSISTENT WITH NUMBERS IN ITEMS 10, 11 & 13

12. Indicate by educational level and handicapping condition the number of special education students served in the following instructional arrangements. This is an unduplicated count. Each student should be listed only once. Consideration should be given to the instructional arrangement the student was provided while the student was enrolled in special education. If a student was provided more than one instructional arrangement, the student should be listed in the arrangement in which he was most frequently placed.

Curriculum	01	02	03	05	11	17	23	29	35	41	47	53	59	65
Columns	02	04	06	10	16	22	28	34	40	46	52	58	64	70
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
INSTRUCTIONAL ARRANGEMENT														
a. Special Education students served on a contractual basis with an approved nonpublic school.		EDUCATIONAL LEVEL	VH	OH/OHI	MBI	AH	EMR	TMR	SH	LID	PS	ED	TOT	
		Pre-Elm. (PA)	12	101	15	136	170	368	140	62		17	1021	
		Elementary (EA)	7	133	40	19	102	826	196	85		167	1590	
		Secondary (SA)		12	17	1	68	537	5	44		144	828	
		Total (TA)	19	246	72	156	345	1741	341	191		328	3439	
b. Special Education students taught by district personnel and served in a special class located in a community center.		Pre-Elm. (PB)	18	133		28	18	102	13	42		32	386	
		Elementary (EB)	18	101	4	16	59	220				431	849	
		Secondary (SB)		19	3		96	348		336	1330	1453	3485	
		Total (TB)	36	253	7	44	173	670	13	378	1330	1916	4720	
c. Special Education students served in county-wide or bi-county-wide day schools for the deaf. Only designated school districts who have administrative responsibility for county-wide should report in this arrangement.		Pre-Elm. (PC)				14							14	
		Elementary (EC)				267							867	
		Secondary (SC)				420							420	
		Total (TC)				1301							1301	
d. Special Education students served in a hospital class setting.		Pre-Elm. (PD)		95		9						4	105	
		Elementary (ED)		992		8						133	1133	
		Secondary (SD)		2247		6					10	910	3713	
		Total (TD)		3334		23					10	1047	4414	
e. Special Education students served in a home setting.		Pre-Elm. (PE)	3	33	1	2	7	10	20	43			119	
		Elementary (EE)	7	1432	2	1	7	21			26	39	1534	
		Secondary (SE)	8	3311	4	1	2	12	1	2	1258	200	4799	
		Total (TE)	18	4776	7	3	16	43	21	45	1254	239	6452	
f. Special Education students who were provided instruction in a totally self-contained classroom located on district campuses where no regular classroom students were located.		Pre-Elm. (PF)	5	99	19	45	39	75	31	275		25	611	
		Elementary (EF)	1	281	123	24	1023	1626	113	208	3	89	2891	
		Secondary (SF)		174	59	3	1244	1246	10	32	1674	604	5066	
		Total (TF)	6	554	201	72	2386	2247	154	515	1677	716	8508	
g. Special Education students served who were provided instruction in a totally self-contained classroom located on campuses where regular classrooms were present. This means that students did not leave the special education classroom for any classes with normal students.		Pre-Elm. (PG)	42	113	85	127	290	151	248	1220		72	2348	
		Elementary (EG)	45	155	1076	45	4302	1746	156	346		222	8013	
		Secondary (SG)	3	68	91	14	1351	1075	31	52	565	219	3459	
		Total (TG)	90	336	1252	186	5943	2972	425	1618		513	13900	

ITEM 12 CONTINUED ON NEXT PAGE

Cards
Columns01 03
02 0405 11
10 1617 23
22 2829 35
34 4041 47
48 5253 58
59 64

65 70

HANDICAPPING CONDITIONS

(A)	(B) EDUCATIONAL LEVEL	(C) VH	(D) OH/OHI	(E) MBI	(F) AH	(G) EMR	(H) TMR	(I) SH	(J) LLD	(K) PS	(L) ED	(M) TOTAL
13 Indicate by primary handicapping condition and educational level, all students served by the special education program who are members of the following ethnic/racial categories:												
Negro	Pre-Elm. (PA)	26	101	10	54	256	121	684	662	1	26	1941
	Elementary (EA)	66	616	1030	284	7171	1000	11531	11100	9	428	33240
	Secondary (SA)	40	1088	431	88	7325	954	704	4249	267	1232	19788
	Total (TA)	132	1805	1471	431	14752	2075	12919	16011	2687	1636	53969
Indian	Pre-Elm. (PB)		2		3			4	3		1	12
	Elementary (EB)		6	10	5	17	4	75	37		4	158
	Secondary (SB)	1	10	2		20	6	3	8	5	11	66
	Total (TB)	1	18	12	7	37	10	82	48	5	16	236
Oriental	Pre-Elm. (PC)		2				2	24	3		1	32
	Elementary (EC)	1	3	8	1	19	5	405	52		3	496
	Secondary (SC)	1	7	9		10	5	169	12	6	3	232
	Total (TC)	2	12	17	1	29	12	598	67	6	6	750
Spanish Surname	Pre-Elm. (PD)	31	170	24	55	110	211	1303	877		18	2799
	Elementary (ED)	93	809	910	357	5887	1277	16602	15305		395	41635
	Secondary (SD)	36	855	446	163	5766	977	1054	4802	553	673	15325
	Total (TD)	160	1834	1390	575	11763	2465	18957	24904	553	1086	59759
All Other Individuals	Pre-Elm. (PE)	60	364	151	262	304	487	4065	2310		138	8681
	Elementary (EE)	253	2046	6598	752	7507	1995	46161	32978	4	2219	100513
	Secondary (SE)	151	4136	3359	344	6510	1699	3094	12012	1741	3646	36586
	Total (TE)	464	6546	10108	1358	14221	4121	53320	47300	1745	5997	145290
Totals	Pre-Elm. (PF)	117	639	185	313	670	761	6080	3855	1	184	12865
	Elementary (EF)	413	3480	9556	1404	20401	4281	74774	59472	13	3048	176142
	Secondary (SF)	229	6096	4247	595	19621	3641	5024	31683	4782	5559	71087
	Total (TF)	759	10215	12988	2372	40902	8683	85878	84410	4796	8791	251944

*NOTE: Column totals by handicapping conditions should be equal to the corresponding column totals in Item 10 and also in Items 11 & 12.

SPECIAL NOTE: REPORT ALL STUDENTS, INCLUDING ALL STUDENTS CONTRACTED TO APPROVED NON-PUBLIC SCHOOLS

HANDICAPPING CONDITIONS

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	EDUCATIONAL LEVEL	VH	OH/OHI	MBI	AH	EMR	TMR	SH	LP			
16. Indicate by handicapping condition and by educational level, the number of identified handicapped students who attend the regular educational program but who need special education services which cannot be provided. This includes those students in the regular program who have been identified as being handicapped, but for whom no special education services are provided.	Pre-Elm. (PR)	6		38	6	50	4	688	104		12	898
	Elementary (EL)	44	15	484	59	1190	74	9995	6786	1	441	19,097
	Secondary (SE)	21	15	237	17	829	12	1486	3397	56	415	6485
	Total (TØ)	71	30	749	82	2069	90	12,169	10,287	57	865	26,472
18. Indicate by handicapping condition and by educational level, the number of identified handicapped students who made application to attend school but are not attending because there are no appropriate or available special education services	Pre-Elm. (PR)	1	8		2		10	1			3	25
	Elementary (EL)	3	15	19	4	36	27	81	154		16	355
	Secondary (SE)		12	4		15	6	31	53		8	107
	Total (TØ)	4	35	23	6	51	43	113	207		27	567
17. Indicate by handicapping condition and by educational level, the number of handicapped students who were dismissed from special education classes because of the lack of educational services to meet the students' needs.	Pre-Elm. (PR)					2	2	7	6			18
	Elementary (EL)		1	29		38	9	193	107		77	364
	Secondary (SE)		2	19	1	48	15	11	113	14	129	242
	Total (TØ)		3	19	1	88	26	211	226	14	36	624
18. Indicate by handicapping condition and by educational level, the number of handicapped students who returned to regular educational programs and who need no further special education services (other than routine follow-up).	Pre-Elm. (PR)	1	50	19		10	1	958	891		78	1948
	Elementary (EL)	9	804	519	21	625	26	16,755	8011	31	282	27,023
	Secondary (SE)	5	1437	332	16	603	4	1464	2747	2348	557	9513
	Total (TØ)	15	2291	870	37	1238	31	19,177	11,649	7379	857	38,544
19. Indicate the number of students by handicapping condition who graduated during the current school year. A graduate is defined as one who has completed the necessary requirements and has received a regular school diploma or special education certificate. This data not include those students who returned to the regular curriculum and require no further special education services.	Pre-Elm.											
	Elementary											
	Secondary											
	Total (TØ)	24	200	361	50	1703	70	91	817	403	151	3775

14

Cards
Column

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HANDICAPPING CONDITIONS

(A)	(B) EDUCATIONAL LEVEL	(C) (D) (E) (F) (G) (H) (I) (J) (K) (L)									
		VH	OH/OHI	MBI	AH	EMR	TMR	SH	LLD	PS	ED
20. Indicate by handicapping condition and by educational level, the number of students in special education classes who have received complete reevaluations. This data is used by the ARD Committee to determine the adequacy of the child's placement and educational programming.	Pre Elem. (PR)	26	59	65	156	133	140	1719	983		39
	Elementary (EL)	109	491	2415	594	7297	1461	26773	13,180	4	908
	Secondary (SE)	73	473	1179	261	6296	1126	1898	5,123	657	1655
	Total (TD)	208	1022	3659	1011	13,726	2727	30394	19,346	661	2602
	Pre Elem. (PR)	1	4	8	10	20	13	75	18	2	151
21. Indicate by handicapping condition and by educational level, the number of special education students who have received reevaluations to determine the adequacy of their placement. This refers to children who have been assigned to special education for three or more years without a reevaluation to determine the adequacy of their placement.	Elementary (EL)	24	127	529	165	1812	525	1209	1571		114
	Secondary (SE)	16	118	485	61	1923	282	70	1057	5	466
	Total (TD)	41	249	1012	236	3735	807	1354	2646	7	580
	Pre Elem. (PR)										
	Elementary (EL)										
22. Indicate the total number of students who received complete evaluations in order to determine their eligibility for special education classes. A "complete" evaluation refers to the collection of sufficient data to allow an ARD Committee to determine eligibility or ineligibility of the students for special education services.	Secondary (SE)										
	Total (TD)										
	Pre Elem. (PR)										
	Elementary (EL)										
	Secondary (SE)										
23. Indicate the total number of students in regular classes who need complete evaluations in order to determine their eligibility for special education classes. This refers to children identified for referral or who have been referred for complete appraisals.	Pre Elem. (PR)										
	Elementary (EL)										
	Secondary (SE)										
	Total (TD)										
	Pre Elem. (PR)										
Total											36,555

A DIAGNOSTIC CLASS IS ONE IN WHICH CHILDREN ARE PLACED FOR A PERIOD OF TIME (NOT TO EXCEED TWO MONTHS) FOR A DIAGNOSIS OF LEARNING DIFFICULTIES. THIS INCLUDES DISCOVERING AND DEFINING EDUCATIONAL TECHNIQUES AND MATERIALS, DETERMINING THE NATURE OF THE LEARNING ENVIRONMENT, AND DEVELOPING AND ASSISTING IN IMPLEMENTING EDUCATIONAL PLANS APPROPRIATE TO THE DIAGNOSED DIFFICULTIES.

Cards
Columns

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HANDICAPPING CONDITIONS

HANDICAPPING CONDITIONS												
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
	EDUCATIONAL LEVEL	VH	OH/OHI	MBI	AH	EMR	TMR	SH	LLD	PS	ED	TOTAL
24. Indicate by handicapping condition and by educational level, the number of students served in a diagnostic classroom this year who, after observation and ARD Committee deliberation, met eligibility criteria for a particular handicapping condition.	Pre-Elm. (PR)	16	41	18	33	124	24	388	671		23	1338
	Elementary (EL)	73	37	202	20	881	89	3128	12493	1	246	17170
	Secondary (SE)	9	76	54	9	1078	36	276	3564	17	297	6018
	Total (TØ)	98	154	274	62	2083	149	3792	16728	18	1168	24526
25. Indicate the total number of students by educational level who were served in a diagnostic classroom this year but who, after observation and ARD Committee deliberation, did not meet eligibility criteria for a particular handicapping condition.	Pre-Elm. (PR)											361
	Elementary (EL)											6071
	Secondary (SE)											1781
	Total (TØ)											